

LESSONS FROM TWO RECENT WARS.

[The Russo-Turkish and South African Wars.]

*Translated for the General Staff, War Office, from the
French of—*

GENERAL H. LANGLOIS

(Late Member of the Superior Council of War).

PUBLISHED BY PERMISSION.



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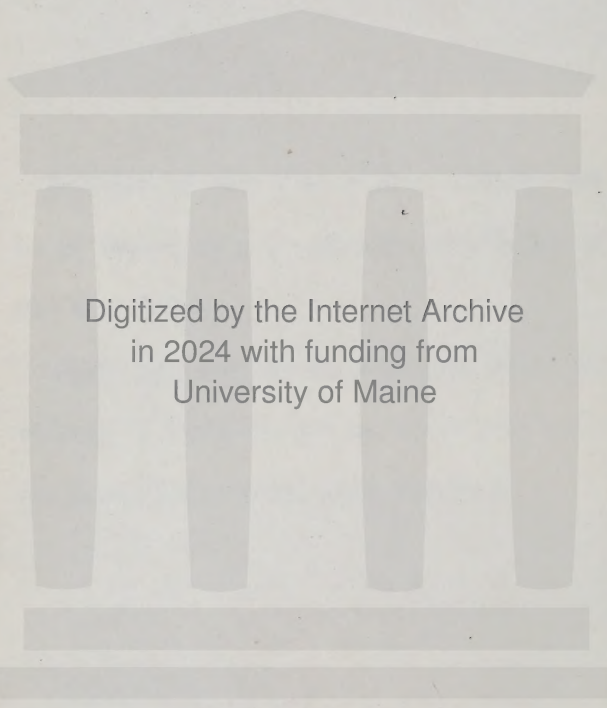
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PREFATORY NOTE.

THIS book (*Enseignements de deux guerres récentes*) was written by General H. Langlois, who before retiring in 1904 had reached the highest rank in the French Army, viz., *Général de Division*, and was for some time a member of the *Conseil Supérieur de la Guerre*.

He is now a member of the Senate and interests himself actively in all matters connected with the army, on which he is considered to be one of the leading authorities ; he also has a high reputation as a writer on military subjects.

GENERAL STAFF,
February, 1909.

INTRODUCTION.

AFTER the war in South Africa, there were a number of people who were struck by the initial reverses of the English. They misunderstood the causes which led to them and were moreover misled by the methods which Lord Roberts employed with such success in conditions that were altogether exceptional. These people made a violent onset against "the professors of tactics" who found in the Napoleonic campaigns the gospel, of not only strategical, but also of tactical science. They inveighed against "the theorists of the employment of masses," terming them "*savants* who based the whole of their doctrines on formulæ, &c."

I had been the *collaborateur* of those professors who founded the doctrine which governs our army, and in after years I had commanded some of them and had succeeded to the position held by others. It was perhaps my duty to enter the lists in their defence. I could have shown how all these officers, Cardot, Vaucheret, Maillard, Bonnal, Cherfils, Lanzerac, Foch, and others, had been through the War of 1870-71, the only European war on which their detractors could base their experiences: I could have shown that these officers had collected their impressions, had studied past events, and after considerable thought had arrived at the following conclusion: "If the Germans were able after fifty years' peace, a period uninterrupted, fortunately for them, by colonial expeditions, to bring about their victories of 1866 and 1870, it was by these same principles of Napoleon which they had studied so extensively." I say Napoleonic *principles* and not *methods*, for it was the principles which our army had forgotten.

These professors, who are so decried now, revived the eternal principles of war as made by Napoleon; then, notwithstanding the statement of their detractors to the contrary, they studied tactical methods which vary with the ever-changing conditions of modern armament. Finally they laid down the general laws which the evolution of tactics follows.

I considered, however, that it is always dangerous to introduce a comparison of persons into a discussion in which common sense and an impartial study of facts should be the only guides; therefore I did nothing. It has now been forced upon me, from experience gained by daily association with regiments and staffs, that the false doctrines which sprang up after the Anglo-Boer war have deeply affected our officers, have upset their ideas, and have destroyed their confidence in their commanders whose opinions have also become unsettled. Our officers are beginning to lose the spirit of the offensive, that is, they are losing confidence in themselves and

in their men. Moreover, these false opinions undermine the bases of the decree, on "The Duties of the Army in the Field," which constitutes our doctrine and our law. The evil at once appeared serious and deep-seated.

Consequently, the duty seems to me indispensable to point out to our officers how our regulations are based on the experiences of war, that these experiences have been well digested, and that they are founded on facts. It is necessary that they should understand not only the letter but also the spirit of our regulations, so that they may be certain that these regulations are their most sure guide and one to be followed with sincere conviction and entire faith.

The object of the present work is to prove and explain by actual incidents in war the correctness of the principles laid down in our "Duties of the Army in the Field," so far as the latter deals with the combat. I make no pretension to an historical account; I shall merely sketch certain actions as shortly as possible, narrating only those incidents which are strictly necessary to prove the conclusions arrived at.

In the discussion I shall confine myself to a study of a situation or event, and have no intention of apportioning blame to the actors. I shall not criticise individuals, for we ought to realise that soldiers who are called upon to command, arrive upon the field of action with a military education which has been created and fostered in surroundings which are permeated by ideas, many of which are often erroneous. It is unjust to hold the chiefs of an army responsible for the mediocre results of an imperfect military education. The responsibility rests with those in higher authority, or rather it should be divided among all who form, as it were, the military atmosphere of their generation.

I cannot sufficiently inveigh against the numerous and harsh criticisms to which our generals and chiefs in 1870 have been, and still are sometimes, subjected. The majority of these officers were men of great intelligence and ability, gifted with courage and with sound and mature judgment. But it had not been possible for them to draw from the military atmosphere of their time the lessons of history, which, in view of a war between nations in arms, should have guided their studies. They are for us, however, great and honourable figures and, as such, deserve our respect even in their misfortunes.

FIRST PART.

LESSONS TO BE DRAWN FROM THE BATTLES OF PLEVNA.

I.—FIRST BATTLE OF PLEVNA (JULY 20TH, 1877).

A. SUMMARY OF THE BATTLE.

Description of the Ground. (Map No. 2).—Plevna is an open town about three miles east of the River Vid, situated at the junction of two streams, the Grivitsa and the Tuchenitsa. The Tuchenitsa, which has deep precipitous banks, divides two very different kinds of country. On the north and east the ground has large undulations, the slopes of which rise steeply from the valleys: the country and the hills, known as the Red Mountains, are as a rule bare of vegetation. The country to the south and west is largely covered with bushes and vines. The hills here, the Green Mountains, are more broken into ridges and spurs, but the valleys are more shallow.

The country is everywhere extremely suitable for the construction of field works, as trenches can easily be dug and earth will stand at steep slopes.

To the north of Plevna, and on the right bank of the Grivitsa stream, there runs a long ridge from the village of Grivitsa to the Vid River. The ridge is narrow in the centre, but widens out into a plateau at either end, especially towards the north-east, where it forms the Opanets plateau. The ridge is nearly seven miles long and rises from 250 to 300 feet above the plain. The Turks had laid out some scattered trenches on this ridge, to be supported by a redoubt which was in construction on the Grivitsa plateau (Redoubt No. 14). Map 2 shows the extent of the Turkish fortifications on the day of the third battle of Plevna, but on July 20th there were no works to the south and south-east of the town.

Turkish Forces.—25 battalions, 9 regular squadrons, 400 Bashi-Bazouks, 2 batteries and 2 sections of artillery. Total, about 15,000 men. The Turks were armed with the latest pattern breech-loading rifles of English and American manufacture. These were far superior to those of the Russians. Their artillery was numerically inferior, but their guns were better, as the Russian guns were of an obsolete pattern.

Russian Forces.—On the evening of July 19th, the 5th Division, which was ordered to occupy Plevna, was distributed as follows (Map No. 1):—

1. In bivouac to the north-east of Bukovleug, 1 brigade of infantry (6 battalions), 4 batteries (32 guns*), and 6 sotnias.
2. In bivouac $3\frac{3}{4}$ miles to the east of Grivitsa, the 19th Regiment, 2 sotnias, and 1st battery (8 guns).
3. At Tuchenitsa, a brigade of Cossacks (10 sotnias and a battery of horse artillery).

Total: 9 battalions, 18 sotnias, and 46 guns.

The Russian Plan of Attack.—On July 19th General Schilder, commanding the 5th Division, ordered two attacks to be made on the following day at 5 A.M. One attack was to be made from the north and the other from the east, and each attack was to be made by the troops in the corresponding section, while the Cossack brigade was to make a wide turning movement to the south. The General personally directed the attack from the north.

At the commencement of operations there was an interval of 5 miles between the two attacks which decreased to a minimum of $3\frac{1}{2}$ miles; there was no connection between the two attacks.

The Northern Attack.—At 5 A.M., July 20th, three batteries opened an ineffective fire on the Turkish batteries at a range of between 3,700 and 4,400 yards. While it was going on, the infantry formed up for the attack in rear of the artillery in the following order:

The 17th Regiment deployed three battalions, two on the right and one on the left of the batteries. The 18th Regiment was on the right of the 17th, with two battalions in the first line and one in the second.

In reserve there were only one battery and three companies of infantry, which acted as escort to the transport and the hospital, i.e., only one-tenth of the infantry was in reserve.

When he saw that the fire of his artillery was ineffective, General Schilder sent his infantry forward to the attack. This was made from the outset in only one line, for the battalion of the 18th Regiment, which was to have been in the second line, came up prematurely on the right of the other battalions.

The Russians were hardly checked by the fire of the Turks, and with great courage, and almost without firing a shot in return, the right wing gained possession of the heights occupied by the enemy. Instead, however, of making good their position, the battalion on the right continued its march on Plevna.

The Turkish line was broken, but towards 7 A.M. the Turkish centre was reinforced by reserves and repulsed the left of the 17th Regiment by an "offensive return"† in a westerly direction towards Bukovleug. At the same time a Turkish detachment at Opanets took the offensive, facing east, against the Russian rear and communications and forced a precipitate retreat.

* A Russian field battery has 8 guns and a horse artillery battery 6 guns.

† See note on page 4.

The retirement was covered by small parties of men got together by an officer, by the regiment of Cossacks which fought for some time dismounted at the edge of a wood, and by the battery in reserve which played an important part during this phase.

The Eastern Attack.—The 19th Regiment, which advanced against the Grivitsa redoubt, was received by fire from the Turkish artillery. The Russian battery immediately replied while the infantry assumed its attack formation with two battalions in the first line.* With the help of very effective fire from their battery and in spite of the Turks' rifle-fire, three successive lines of trenches were captured by the Russians, but their loss was enormous. They were continuing to advance along the Grivitsa Valley, when they suddenly came under fire of a battery at the Plevna head-quarters (Work No. 6). At the same time the Turkish infantry made a fierce "offensive return" which forced the Russians to retire. The retreat, which was extremely costly, was covered by their artillery fire.

The Turks did not push the pursuit beyond their regained trenches.

B. REMARKS ON THE FIRST BATTLE OF PLEVNA.

The Russians.—The Russian advance was not preceded by a reconnaissance, either with cavalry or an advanced guard. With no knowledge of the enemy, the commander decided on his entire plan of action. Two attacks, separated from each other, absorbed the whole of his fighting strength. There was no reserve told off, and the bulk of his cavalry was fruitlessly employed on a distant mission of its own.

In fact the plan meant dispersion.

In neither of the attacks was there an advanced guard engagement or a preparatory combat. A decisive attack, which had no depth or protection for its flanks, was immediately launched against the enemy. In the northern attack the artillery could neither prepare the way for, nor support the infantry.

In neither attack, however, could the breech-loading rifle stop the Russians, and the enemy's trenches were captured. But instead of instantly making good the ground that they had gained, the Russian infantry, whose supreme courage is unchallenged, foolishly continued their advance and thus rushed to their destruction. The retreat, especially in the northern section, was far more costly than the initial success.

The Turks.—The success of the defending force was due to skilful use of the offensive. In both parts of the field it assumed the

* A Russian battalion has 5 companies, and the normal formation at this time for a battalion in the first line was as follows :—

1st Echelon : the rifle company extended.

2nd Echelon : 240 yards in rear, 2 companies in line of company columns.

3rd Echelon : 240 yards in rear of the 2nd Echelon, 2 companies in the same formation.

form of the "offensive return,"* and not that of a counter-attack; and it was made possible by the strong reserves kept at the disposal of the commander which were powerfully supported by artillery placed in rear of the line of defence.

Undoubtedly the disproportion between the Russian and Turkish forces gave little promise of success to the former, in spite of their superiority in artillery and cavalry. Nevertheless it cannot be contested that, if the fight had been more skilfully conducted, the Russians would at any rate have escaped their enormous losses (74 officers and 2,771 men, or one-third of their effectives), together with the demoralisation which these losses entailed and the moral consequences of a defeat.

II.—SECOND BATTLE OF PLEVNA (JULY 30TH, 1877).

A. SUMMARY OF THE BATTLE.

The Entrenched Camp of Plevna (Map No. 2).—On July 30th the fortifications of the entrenched camp were as follows:—

The Turkish trenches had been strengthened along the whole length of the ridge which rises from the right bank of the Grivitsa stream. The works which were most advanced were those on the plateau to the north-west of Grivitsa, and these works are the only ones in this section which are of any interest to us. They consisted of Redoubt No. 14† and of an epaulment for four guns; in front of them were shelter trenches which are not shown on the map. On the south the defence was limited to the plateau which borders Plevna; the southern front of this plateau extends for about 2,750 yards, and it is about 1,650 yards wide. Several works had been started here; in the first line, No. 1 Redoubt was in course of construction; No. 2 Redoubt was traced out; and No. 3 was a simple epaulment for a battery. These works were protected in front by trenches, in front of which again were rifle pits. In the second line, the supporting positions Nos. 4 and 5 were merely provided with trenches which were not converted into regular works till some time later. In the third line was No. 6, the Head-Quarters battery, which played an important part in all the Turks' offensive returns, in whichever direction they were made. Works Nos. 7, 8, 9, 10, 11, 12, and 13 did not exist. There were merely a few

* It is necessary here to define a perhaps rather obscure terminology. In France, by the "offensive return," we mean an offensive action by the defenders, which has for its object the regaining of a position from which they have been driven by the enemy. This interpretation is in accordance with our "Infantry Regulations," Part IV, Sec. 146, and with the "Provisional Regulations," Part V, Secs. 54 and 70, and Part VII, Sec. 25. We term a "counter-attack" an offensive action directed by the defence against the assailant *before* he reaches the defensive position, that is an offensive directed against his attack.

NOTE.—General Langlois refers to the "Règlement sur les Manœuvres de l'Infanterie" of 1894, and the Provisional Edition of 1903. A new edition of the Règlement was issued in 1905; *i.e.*, after the publication of General Langlois' book.

† The works in Plevna were known by names and not by numbers. I have preferred to use numbers as they are shorter and clearer.

trenches on the sites on which Redoubts No. 7 and 8 were afterwards constructed.

The Turkish Force.—The Turkish force (20,000 men approximately) consisted of 33 battalions of about 550 men each, 7 squadrons, 400 Bashi-Bazouks, and $9\frac{2}{3}$ batteries (58 guns). The force was divided between the different sections of the defence, and each section had a strong local reserve. The general reserve included 12 battalions and $5\frac{2}{3}$ batteries, *i.e.*, more than one-third of the infantry and one-half of the artillery.

The Russian Force.—The officer entrusted with the attack on Plevna was General Krüdener, commanding the 9th Army Corps. He had with him about 35,000 men: 36 battalions, 32 squadrons, and 22 batteries (170 guns). His force was consequently numerically superior to that of the Turks, especially in cavalry and artillery.

A battalion was about 800 strong.

On the eve of the battle the Russian troops were stationed about, and to the east of, Plevna, on a semi-circle, the two extremities of which were distant $6\frac{1}{4}$ and $9\frac{1}{2}$ miles respectively from that town.

The Russian General's Dispositions.—General Krüdener divided his force into two main and two subsidiary attacks:—

- (1) Against the east front (Grivitsa): the 31st and 5th Infantry Divisions (18 battalions and 80 guns), under the command of General Velyaminov.
- (2) Against the southern front: 2 brigades, one from the 9th corps, the other from the 4th corps; strength, 11 battalions, 2 squadrons, and 48 guns, under the command of General Shakofskoi.
- (3) The Caucasus mixed brigade (14 sotnias, 12 guns and 1 battalion), under the command of General Skobeleff II. This brigade was ordered to operate on the right bank of the Tuchenitsa and to protect the left flank and rear of General Shakofskoi from the direction of Lovcha and Sophia.
- (4) The protection of the right flank was entrusted to General Loshkareff, who was to operate towards Opanets with 12 squadrons and 6 guns.

The general reserve retained by the commander consisted of 6 battalions, 4 squadrons, and 4 batteries or only one-sixth of the infantry. We shall see later how this small reserve disappeared.

Attack against the East Front.—At 7 A.M. General Velyaminov began his deployment near the wood about 2 miles to the north-east of Grivitsa. This drew the fire of the Turkish batteries and the Russian batteries immediately replied. The purely artillery fight, or *the preparation by the artillery*, was to last till 3 P.M. (8 hours), for it was not till 2.40 P.M. that the general commanding, who had taken up his position between the two attacks, sent General Velyaminov orders to advance.

The latter general then launched his attack against the Grivitsa redoubt with 5 battalions from the north and 4 battalions from the

east. The reserve of his force was distributed as follows: two regiments followed in échelon of the right wing, and one regiment in échelon of the left. The leading battalions gained some of the trenches in front of the redoubt, but were unable to advance beyond them; others reached a ridge at no great distance from the redoubt, but were unable to advance beyond it. A long fire combat ensued between the two sides at short range. Then the two regiments on the right joined in by prolonging the flank on their side. They assaulted and captured a line of trenches and, charging forward, made for the redoubt, but were unable to get possession of it. When the first wave had been neutralised by too long an exposure to the enemy's fire without the possibility of advancing, a second wave came up and was destroyed at the same place. The regiment on the left, which at first was directed against the village of Grivitsa, attacked the redoubt in its turn and met the same fate as those on its right. It occupied some shelter trenches which were very close to its objective, and was there immobilised. The third wave came up too late and was destroyed without getting any further than the first two. In this way the fate of 17 battalions was decided; they came up in succession, congregated in a space with a front of little more than 1,600 yards, and were then immobilised by the enemy's fire. There was only one battalion in reserve to cover their retreat.

We shall see later that the Russian commander was of opinion that the Grivitsa redoubt was the tactical key of the Plevna position, and that he continued to reinforce the attack on the eastern front. But he did this tardily and by dribblets and therefore without success.

The Russian troops maintained their positions during part of the night, and then with difficulty disengaged themselves to carry out their retirement.

Attack against the South Front.—General Shakofskoï, who was in command of the southern section of the attack, occupied the village of Radishevo without firing, as it was undefended. He deployed his artillery along the ridge to the north of this place, on a remarkable position within 2,700 yards of that of the Turks. He protected the rear of the massed batteries by a brigade of infantry and opened fire. The bombardment lasted five and a half hours, from 9 A.M. till 2.30 P.M.

We will quote the words of an eye-witness:—

“In order to make sure that the artillery had sufficiently prepared the way for the infantry, General Shakofskoï, with his staff, mounted the plateau where our batteries were in action. He was obliged rapidly to dismount from his horse owing to the hell of fire which the Turks directed against his escort. After a long and careful inspection the General appeared satisfied; he and his Chief of the Staff considered that the infantry could now begin the fight.”

It would appear from the above that the bombardment had had

no effect whatever, but the General, on the contrary, declared himself satisfied. We will continue the quotation.

"It was in presence of the fact that we had at our disposal three brigades and no more, of which one was in reserve, that this decision was made. In other words, we were about to send from 12,000 to 15,000 men against an entrenched position occupied by a very superior force, and *a force which was not shaken by artillery fire.*"

Works Nos. 1 and 2 were the objectives of the attack. The battalions of the 126th Regiment were pushed forward against No. 1 Redoubt. They moved over the ridge in the intervals between the guns, and descended the glacis without great loss. After keeping up a fire for a short time from the bottom of the Suluklia ravine, they made a rush forward which took them to some dead ground at the foot of the further slope. Here they were able to reform, and, surrounding the redoubt on three sides, they captured it.

The attack on No. 2 Redoubt was made by two battalions of the 125th Regiment. They crossed the ridge to the west of Radishevo, but their progress was difficult, for when they had arrived at the foot of the slope and began to ascend the hill towards the redoubt, there was no dead ground to give them cover. Exposed in front to fire from the redoubt they were attacking, and in flank from Redoubt No. 3, the Russians suffered heavily. It was felt necessary to prolong the flank, and a battalion of the 118th Regiment was sent up on the left, while a battery came into action on hill 315, to the south-west of Plevna. Owing to this diversion and to the timely action of the 126th Regiment which advanced from No. 1 Redoubt to No. 2, the latter redoubt was also taken.

The attack had the best of it so far, and the Turks for a time thought that the day was lost. It needed in fact but little for the Russians to gain their object. Unfortunately their infantry allowed themselves to be carried away by their *élan*. They advanced beyond the positions they had captured, and suddenly found themselves stopped by the defenders who, abandoning the redoubts, had formed a dense line of skirmishers about 400 yards in rear of them. The Russian infantry could reply to the fire of the skirmishers, but the latter were assisted by artillery fire from the Head-Quarters redoubt (No. 6), by the guns retired out of the captured redoubts, and even by artillery in the northern section which was not attacked by the Russians. The Russian infantry were unable on account of the range to reply to this fire, and none of their batteries in rear near Radishevo came up to protect them from the hostile artillery.

The situation was critical, and it became more so when Osman Pasha collected his reserves and brought them up against the two flanks of the Russian line, closing it in with the grip of a vice. The immediate necessity was seen for protecting the flanks of the attack; fresh batteries and two more battalions were moved up towards the left, and a corresponding force to the right. But while this tardy operation was being carried out, the infantry

continued to suffer. As the special reserves of the section had all been utilised, there was no power from the rear to propel the infantry forward. They were gradually scattered and broken up, and the result was a rout, and a rout on a terrible scale. The loss in this section of the attack amounted to 7,355 men—more than one-fifth of the total effective strength. The infantry lost more than one-quarter of their numbers, and the battalions chiefly engaged left on the ground from one-third to even one-half of their men.

Left Wing Detachment.—This detachment was directed against Krishin and had several encounters with the enemy's battalions which were occupying the height to the south-west of Plevna. In the evening it neared the bridge over the Tuchenitsa, on the Lovcha road. It was therefore in a position to protect General Shakofskoï's left flank at an opportune moment. At this point of the battlefield alone, touch between the various detachments was established.

The Right Wing Detachment.—"On the extreme right, General Loshkareff's cavalry detachment endeavoured to draw the enemy's attention towards Opanets and Bukovleug. It failed to obtain any appreciable result, and remained in observation of the Turks, merely exchanging a few rounds of artillery with Colonel Suleiman Bey's troops. When General Krüdener, about 3 P.M., saw that the two principal attacks had gained possession of the Turkish advanced posts, he considered that victory was certain, and ordered General Loshkareff to cross the Vid and occupy the road to Sophia, with a view to cutting off the enemy's retreat. By carrying out this quite premature order, the cavalry on the extreme right made a useless move, and, when required, were too far off to assist in covering the retirement.

B. REMARKS ON THE SECOND BATTLE OF PLEVNA.

I. *The General Reserve.*

A study of the day's events leads us first to a repetition of the observations made on the first battle of Plevna. There was no preliminary reconnaissance, either by the cavalry or by advanced guards. On quite vague information, the commander once again devised his whole plan of attack; and he kept so weak a reserve at his own disposal that he found it impossible to act vigorously at the point where he would have had a chance of striking a decisive blow.

We will see now how the small reserve was employed which he retained under his own hand; it consisted of 6 battalions, 4 squadrons, and 4 batteries.

- (i) "At the same moment (about 2.40 P.M.) information was received that on the extreme right, touch had been lost between the Dragoons and Lancers, as the former had been driven back by the Bashi-Bazouks. I immediately ordered Lieutenant-Colonel Matsievsky of the staff to take

two squadrons and two horse artillery guns from the reserve to assist the Dragoons and re-establish touch between them and the Lancers.”*

- (ii) About 4.30 P.M., when matters were beginning to be serious in the southern section, a regiment (three battalions) and a battery were sent to reinforce it.
- (iii) Towards 6 P.M. “I was warned that our extreme right was retreating. I therefore ordered the 1st battalion of the 120th Regiment with a squadron of Dragoons and two horse artillery guns in that direction.”
- (iv) A little later, as night was coming on, and “as the issue of the fight depended above all things on the capture of the redoubt (Grivitsa), I again sent in this direction two companies and two horse artillery guns.”
- (v) A little later. “I made a last attempt, and sent to the same place three more companies of the same regiment under the direct orders of the officer commanding the brigade.”

We see how the general reserve was frittered away in five successive small detachments, three of which were told off for purely subsidiary tasks. Consequently the commander could only send five companies to the point which he considered to be the tactical key, and those only part at a time. Did he really think that such forces could succeed where two divisions had just failed? Evidently General Krüdener had no conception of the “deciding blow with the closed fist,” to use General Dragomiroff’s expression; that is, of the decisive attack made by a mass of troops launched against the enemy by the Commander-in-Chief himself.

He had made up his mind as to which was the decisive point, but trusted to a subordinate to achieve success there; in other words, he abdicated the command. He did not realise that only by means of reserves, and very strong reserves, could he maintain control of the combat. These reserves he should have utilised, not merely to ward off small accidents of the fight, but to make a powerful intervention with, and to pierce the enemy’s front with a considerable force, at the point revealed by the fight itself to be the most vulnerable.

2. Premature Choice of the Point of Attack.

The General-in-Chief was mistaken in his preconceived plan of attack in his choice of the point of attack. General Krüdener, in the orders which he issued for the following day, conceived the Gravitza redoubt to be the tactical key, for he told off half his infantry to the eastern section, one-third to the southern, and kept one-sixth as a general reserve. He was ignorant of the fact that, as a rule, only the preparatory combat, as we term it, can enlighten the commander where his blow should fall, the object of which is

* General Krüdener’s report.

to overthrow or break through the enemy ; and that this preparatory combat requires in most cases considerable time, sustained effort, and those "rude tasks" which, according to our regulations, are the lot of the infantry.

As a matter of fact, the weak point of the defence was not the Gravista redoubt.* All the Russian efforts broke in vain against this redoubt, while a vigorous assault from the southern section, after the capture of Nos. 1 and 2 Redoubts, would very probably have carried the *réduit* of the Turkish position.

The attacking side should not expend itself against the strongest point in a position, but should rather search for the weakest in it, and there break through the enemy. At about 4 P.M. General Krüdener was in a position to take in the situation from the actual fighting ; he could then have availed himself of the preliminary success in the southern section, if he had had at hand a sufficient general reserve ; that is, if he had not at the outset split up his forces. But he had nothing left.

The conclusion is forced on us that there must be no preconceived plan ; that the enemy must be felt everywhere, and that the most powerful force must be applied, not at the strongest point, but at that point where the fight shows the enemy to be weakest. For this purpose very strong general reserves should be kept at the commander's disposal. Their rôle is, not to remain inactive, but to attack the selected point at the desired moment, if necessary with every available man.

Perhaps General Dragomiroff was thinking of this day, July 20th, 1877, when he said in his criticism at the end of some manœuvres, "To deal a decisive blow you must keep your fist closed, and be ready to strike at the opportune moment. If you hit with your open hand, you will knock no one down, and will only hurt your fingers."

3. *The Preparation of the Attack by the Artillery.*

General Krüdener's conception of the preparation of the attack by the artillery was erroneous. Very many authorities display a great want of precision in dealing with this subject, and this may be due, perhaps, to the double meaning of the expression, "preparation of the attack," i.e., by fire or by combat. In the strict sense of the word, "preparation" is the act by which the artillery opens, by means of its fire, the way for the infantry. And here the conception of the Russian commander was faulty, for the mere bombardment of a position effects nothing, either against the obstacle—the parapet of earth being, so to speak, invulnerable—or against the defending troops who keep close to the parapet, and so almost entirely escape the effects of the projectiles. What happened at Plevna shows this to be the case.

To wear out the infantry of the defence, the co-operation of the two arms, the infantry and the artillery, is necessary. The

* The third battle shows this.

former by their advance to the attack, by their menace, and finally by their actual attack, draw the defenders from their shelter, and then the artillery can hit and hit with effect. It hits the man firing from the trench who partly exposes himself to let off his rifle; it hits the supports who leave their cover to reinforce the firing line; it hits the reserves which get into position for the counter-attack.

It should be remarked that the time taken by the infantry to advance from their last shelter to the assault, affords the artillery ample time for its task. As a rule the power of the preparatory fire is limited rather by the ammunition supply than by time, especially in the case of quick-firing artillery. We shall see, for instance, at the third battle of Plevna, how Skobelev's attack took an hour and a half to attain its objective, and it took about the same time to establish itself firmly in the position which it had captured. During these three hours the batteries on which the task devolved of opening a way for the infantry—breaching batteries as we call them—would be advisedly employed in continuing uninterruptedly the rapidest fire possible. But this is materially impossible, for all the ammunition of an army corps, as well as that in the army corps park, would not be sufficient to permit of a fire of this nature being sustained for so long a time.

As a general rule, then, the ammunition supply imposes certain limits, and, as it is impossible to keep up the maximum rate of fire during the whole of the attack, fire must be graduated accordingly to the needs of the infantry. The following are the principles for the preparation of the attack by fire; the preparation during the advance of the attack should be by as strongly a sustained fire as possible, and, if the ammunition supply does not permit of this, it will be by a fire graduated according to the needs of the infantry.

These are the principles laid down by General Skobelev in his instructions to the troops on the eve of the battle of Lovcha, a battle which took place between the second and third battles of Plevna:—

“The order for the attack will be communicated to the battery commanders, and it is advisable that they should not distribute their fire. When *the infantry are advancing to the attack*, they will be supported by *every available gun*. Great attention must be paid to the progress of the fight. Artillery fire should be *redoubled* when the enemy shows his reserves, and should reach its greatest intensity when the attacking troops *are halted by an obstacle*.” The obstacle is usually the defenders' fire.

The portions in italics correspond to the principles laid down in the preceding paragraph. The Commander of the Russian force had no idea of these principles, and it was the same with the British operating in Natal twenty-two years afterwards.

We may ask how this false conception of the artillery preparation arose. The error is, we may say, very general and persistent. It appears to be due to a wrong choice of time and to not under-

standing what the object of the artillery preparation is. The following seems to be the explanation.

The Time.—In the days of smooth-bore muskets and guns, infantry fire was employed up to about 200 yards, and the really effective fire of artillery began with case shot at from 300 to 400 yards. The latter was the fire employed by the massed batteries of the First Empire, and it was used when the infantry mass was in closest proximity to the enemy, and lasted for several moments with almost inconceivable intensity.* Immediately it ceased, the infantry charged. Thus the assault followed directly after the artillery preparation, and there were two distinct phases.

In siege operations the procedure was the same. The infantry assembled in trenches in close proximity to the breach, and awaited the effect of the bombardment which weakened the defenders and kept off the reserves. As soon as the bombardment ceased, there came the attack, *i.e.*, the assault. Again there were two distinct phases.

This is no longer the case to-day. The attack leaves its last cover, often at some distance from the enemy (2,750 yards in the southern section at Plevna, and 1,300 yards in the south-western section at the third battle); during its progress it may first come under artillery fire, and then under the combined infantry and artillery fire of the defenders. It requires the support of the artillery to open a way for it. It is during this advance that preparation by the guns is really performed, a preparation which has still the same object as that of former days, *viz.*, to paralyse the defence and keep back the reserves.

The analogy to the past becomes complete when the attacking infantry are so close to their objective that their own artillery are obliged to discontinue their fire against it; then, as before, comes the assault. To-day, however, the artillery can still continue an effective action against the enemy's reserves by lengthening the range over the heads of its infantry. In this case, as in every other, the increased power of guns favours the offensive against the defensive. This is a real law which often is not understood, but is confirmed by every war which has been properly conducted.

The Object.—Another false idea is that artillery can destroy the obstacle which checks the infantry; and in this instance the material obstacle is meant. Here again, in my opinion, is a relic of the past.

When the infantry attacked a redoubt, a village, or a walled enclosure, the artillery used to come up within short range, 300 to 400 yards, of the material obstacle. Here it easily made a moderate breach, through which the infantry poured on a narrow front. Nowadays, at the usual fighting ranges, artillery cannot make breaches for the infantry, for the latter attack on a relatively large front. Artillery can demolish a few sections in a wall, and

* The nearest approach to the artillery fire of those days is the infantry rapid fire which, according to our regulations, immediately precedes the assault.

perhaps even the enclosure of some small locality. But the defence suffers little from this gap, for a few rifles placed on either flank easily prevent access to it. Artillery is powerless against lines of trenches, that is against the material obstacle; its rôle is to paralyse the defenders. It is useful to repeat this truth, which was not understood by the Russians in 1877, nor by the British, unfortunately for them, in 1899.

This interpretation of the expression, *artillery preparation* is insisted on, because our officers may still have a false idea of it from our regulations.

4. *The Preparation of the Attack by Combat.*

The preparation of the attack by artillery fire is not, as we have seen, a separate phase of the battle: it is simply a special action on the part of the artillery while the attack is being carried out. From a more advanced point of view, the preparation of the attack is a special period of action, the object of which is to wear out the enemy's force; to immobilise him along his whole front, and to search out the point where the gate of the defence is to be struck with force and broken open. This phase was at first known as the *demonstrative combat*, an entirely inappropriate term, for it does not express the forcible nature of the engagement which should be its essential feature. Later it was called the *wearing-out or wasting combat*, an expression which was more accurate than the one before. Finally the "Duties of the Army in the Field" definitely designed this phase as the *preparatory combat*. This name clearly indicates that its object is: to prepare the whole extent of the front for the decisive action against a particular point, or rather against a comparatively restricted portion of the front.

The Russians had no idea of preparation by combat.

In the eastern section General Velyaminov, without any previous action beyond a long and useless bombardment, launched what was nothing else than a decisive attack with five battalions in the first line and ten battalions in the second and third lines, against a single objective, a redoubt. This huge mass, without reserves, so to speak, advanced straight against an enemy who was strongly entrenched, still intact, and whose morale was unshaken. The head of the mass was checked at a fairly short range; successive reinforcements were sent up from the rear, but were not in time, and were brought to a standstill at the same place. The action was unconsciously transformed into a kind of preparatory combat, which succeeded in immobilising a part of the Turkish troops in the eastern section, but had not the necessary destructive power to wear out the adversary and make him expend his reserves. While this engagement was of service in aiding the action of the troops who were fighting in the southern section, it absorbed a force which was altogether out of proportion to the result gained. It was unconsciously a preparatory combat which was as ineffective as that

of the infantry of the Prussian Guards on August 18th, 1870 (see 1st Part, III. D. 3 and 2nd Part, B 5).

The plan of the officer commanding the Russian troops in the southern section was similar to that which we have seen carried out in the neighbouring section. After a prolonged bombardment, of which the infantry were mere spectators, the general made what was nothing less than a decisive attack ; it was carried out with the utmost vigour and succeeded, but it was badly organised and, when the troops pushed forward with their reckless, ill-timed valour, a disastrous reverse resulted.

5. Dispositions for the Attack.

The attack was not properly organised in either section.

- (a) The flanks were not protected. In the eastern section, for example, at one time the right wing fell back and had to be supported from the general reserve. In the southern section, immediately after the occupation of the enemy's position (Redoubts Nos. 1 and 2), the attack tried to move forward and found itself attacked on both flanks ; the situation was the more serious, as no provision had been made for protecting them. Although the Turkish force which attacked the Russian flanks was not considerable, it compelled General Shakofskoï to send up from the reserve two battalions successively to either flank, as well as several batteries. When the troops came up in support, it was too late ; for orders had to be sent to the reserves which were a long way in the rear, and the men had to make a long march. The minutes which passed tried very highly the already harassed infantry ; their losses increased, they were thrown into disorder and were demoralised. In this condition they can readily be routed.
- (b) There was no co-operation between the arms. The engagement began with artillery fire, while the infantry looked on passively. Then the infantry engaged, and were scantily supported by the artillery which had already expended the great part of its ammunition. When the infantry were on the point of assaulting the position and had yet to cover some 300 yards or more under a devastating fire, the artillery abandoned them to their fate, that is when they had most their difficult task to perform. Finally, when the position was carried, not a single battery hurried up to protect its infantry from the hostile artillery fire, to aid in maintaining the position, or to be in time to cover a fresh advance.
- (c) In the southern section, the infantry did not use the opportunity they had to make good their ground. When they had occupied Nos. 1 and 2 Redoubts, their main ideal should have been to hold on to the position by

digging trenches and throwing up the earth ; then they could have reformed, and resumed the attack under favourable conditions. Their military education, however, had not been conducted on these lines ; they despised cover and possessed no entrenching tools. In consequence of these errors, the Russians not only sustained enormous losses, but were deprived of a victory which at one time was within their grasp.

C. OBSERVATIONS ON THE DEFENCE.

As in the first battle, fire at long ranges did not check the attack. In the eastern section, the Russians, after carrying the first line of trenches, got within close range of the redoubt ; in the southern section the attack was never checked, although it was indifferently supported by artillery, and hardly at all by infantry fire ; for, in consequence of his previous training, the Russian despised fire as he despised cover. The Turks, it should be remembered, had a rapid loading rifle and an abundant supply of cartridges, so they were able to take every advantage of their weapons.

The depth of the defence is a noticeable point. When the most important works (Nos. 1 and 2) were captured, the attack found itself confronted by a second line which was even more difficult to carry. For when the Russian infantry delivered their second attack, they were unsupported by their own guns, and had with their own resources to engage both the enemy's infantry and artillery. The defending force again relied on the "offensive," and this offensive, as at the first battle, was in the form of the offensive return, and not that of a counter-attack.

It is easy to understand that the offensive return, which is prepared under, and debouches from cover, has more chance of success than the counter-attack. For instance, if the latter debouched from the ridge on which Nos. 1 and 2 Redoubts were situated, it would find itself under accurately ranged artillery fire from Radishevo, and would also be exposed to rifle fire from the assaulting infantry.

I think it useful to dwell on this point, because our regulations make scarcely any mention* of the "offensive return." The "Duties of the Army in the Field" do not speak of it, and in the "Infantry Regulations" the expression "offensive return" occurs only accessorially. In the "Provisional" edition, the chapter on battalion training refers to it under the section headed "The Pursuit." In

* The "Règlement sur les Manœuvres de l'Infanterie" of 3rd December, 1904, discusses the counter-attack and the offensive return in Sec. 270. A footnote on page 88 of the *Règlement* defines them as follows :—

Counter Attack.—An attack made by the troops of the defence against the attacking troops, before the latter reach the position.

Offensive Return.—An attack made by the troops of the defence with the object of driving the attacking troops from the ground which they have just captured.—[TRANS.]

the chapter on the training of the regiment, it is somewhat better explained in three short paragraphs, but the counter-attack has nine paragraphs devoted to it. We have scarcely ever seen the offensive return practised at manœuvres. I think, therefore, that we should devote considerable attention to this point in the lessons from Plevna. In face of the artillery of the present day, the counter-attack is more difficult even than it was in the past, and it is very important to realise this.

D. A MODERN CONCEPTION OF THE BATTLE OF PLEVNA.

An attempt will now be made to sketch how the battle might have been conducted under modern conditions. It is hoped that in the following lines there may appear no idea of wishing to attach blame to anyone, for this would be foolish pedantry. We shall simply make use of a concrete example of what has been, in order, if possible, to illustrate for our younger officers the application of the principles laid down in the "Duties of the Army in the Field," which forms the basis of their tactical education.

As we have no intention here of discussing either strategy or grand tactics, we will take the plan of operations of the Russian commander, and assume that his information decided him to limit his sphere of action, as he did, to the southern and eastern sections of the entrenched camp.

A priori, no reasoning ought to lead him to attack with the bulk of his forces one front in preference to the other. He ought to feel the front everywhere, and the result of the preparatory combat should show the weak spot where he can break through. Given these conditions, it seems that if he sends a division (twelve battalions) against each front, and retains at his own disposal a general reserve of at least twelve battalions, he will be in a position to guard against unexpected accidents and can keep in his own hands, until the moment when he makes his final decision, a force which he can use "like a sledge hammer." As there is a considerable space between his two attacks, the general reserve should be placed in rear of the centre. The two sections will be connected by a part of the cavalry, which in the battle of Plevna was uselessly employed in the direction of Opanets and the Vid River. The remainder of the cavalry and the horse artillery will be close up covering the two wings, as was done on the left by Skobelev's detachment.

We will now see how we can work out the preparatory combat in the two sections.

Southern Section.—We will avail ourselves of the information kindly afforded by Major Bonneau, who visited the field of Plevna while the fortifications were still standing, and particularly studied the infantry line of advance.*

* We shall see later how Skobelev conducted a preparatory combat on a ground with quite different, natural features: the details were different, but the mode of action remains the same.

In the western part, a certain portion of the infantry will work round the long ridge to the north of Radishevo, keeping near the Tuchenitsa. They can move unseen by the defenders till they reach Hill 315 (which was not occupied by the Turks on July 30th). This hill is situated about 1,300 yards from Battery No. 3, and 1,650 yards from Redoubt No. 2; that is to say, it is within effective rifle range of those two works. When they have gained this hill the troops will place it in a state of defence and will leave in it a garrison as a rallying point. This position can, and should at once, be strengthened by batteries, as there is nothing to stop the latter from getting up the hill. Under the protection of the artillery near Radishevo and on Hill 315, and covered also by the infantry on the latter, other bodies of infantry will work round the hill, and will form a firing line at the bottom of the Suluklia valley. There it will rapidly improve the cover, afforded by the ditches on either side of the road, by the banks of the stream, or by the folds in the ground. Thus a double tier of rifle fire will be obtained, which will enable the skirmishing line to push forward by rushes, perhaps as far as Battery No. 3. Let us suppose that the result is the same as it was in the actual battle, and that the firing line cannot reach its objective; it will none the less be a constant menace of an attack at any moment to the defenders. Moreover, the troops are well protected, on the left flank by Hill 315, and on the right flank by the other troops in the section.

In the eastern part of the section, the ground has a very different formation. A long glacis extends from the ridge at Radishevo to the bottom of the valley. The glacis, however, is not bare, but is covered in parts with maize 6 feet high.* These crops could not conceal an advance made in mass, but small bodies of infantry could very well creep along the edges till they reached the northern limit of the cultivation. Here they would throw up light field works, and would assist in pushing forward the firing line, at first to the bottom of the ravine, and afterwards to the dead ground at the foot of the slope which the Russians found so useful. From there onwards a glacis rises to the Turkish position, but there are a series of folds in it, one of which is distinctly shown in the contoured map prepared by the Russian General Staff. The crests of these folds form the various stages for the firing line, which will thus get within close rifle range of the line of defence.

If there were no maize crops to mask the advance along the glacis, small columns could work their way round by the head of the Suluklia valley, and get within 400 or 500 yards of the Turkish trenches; they would then work up to them as described above.

From this moment the defence is in a condition of marked inferiority to the attack; its artillery cannot be used effectively against the enemy's firing line, because it would then be exposed to both artillery fire and to infantry fire at short range. The equilibrium between the two sides is destroyed and the attack has

* This was so when Major Bonneau visited the ground.

the advantage, for it has, so to speak, two powerful lines of fire, infantry and artillery, against a single line of fire (infantry). Suddenly, when it judges that the opportune moment has come, one of the bodies of infantry will charge the line of defence and will occupy it. This will probably result in its having to fight a defensive action, especially if the defenders are stubborn and endeavour to recapture the ground which has been lost.

Various local attacks of this nature will take place along the front. The principal factors of success in this phase of the engagement are the individual initiative, vigour, and courage of the subaltern officers and men. Every man engaged must be imbued with the idea that the fate of the battle is in his hands, and must act accordingly.

Let us return to the events of July 30th, 1877. We saw that the five battalions of the southern attack advanced without precaution, and with little assistance from the artillery which had expended its ammunition; we may also say without infantry covering fire, without reserves, and without flank protection, and they captured Nos. 1 and 2 redoubts. Is it not evident that a smaller force could have achieved the same results, if the methods which we have described above had been adopted?

Then, instead of inconsiderately pushing forward, the battalions should set to work with their picks and shovels to place the captured position in a state of defence. Their task would probably be protected, (1) by the artillery in rear, which would lengthen its range and form a dangerous zone 300 to 600 yards beyond its own infantry, which the enemy's reserves would find it difficult to traverse; (2) by batteries which would have followed close behind their own infantry and would have galloped into the captured position with them. The two flanks would be solidly supported on the left by infantry and artillery on Hill 315, and on the right by the occupation of the hill at the head of the Suluklia valley, or by troops in *échelon* in rear. Behind the attack, as it progresses, rallying points would be fortified and held by small garrisons which would have a plentiful supply of ammunition, and would be ready to support the troops in front if they were forced back.

Eastern Section.—A detailed study of the ground in this section has not been made. General Velyaminov's five leading battalions took possession, unaided, of the enemy's advanced trenches and of a crest situated about 800 yards south-east of the redoubt. All efforts to advance from here were useless, but the troops held on to these positions in close proximity to the enemy. The remaining troops and the cavalry protected the flanks.

It may be raised as an objection, that a cautious advance of the attack, such as we have described, means the expenditure of considerable time. On the other hand, it should be remembered that the useless bombardment in the eastern section lasted eight hours before the infantry advance began, while that in the southern section occupied five and a half hours. The cautious advance of a preparatory combat, such as that outlined above, would certainly

not require that amount of time. In short, by the time that the infantry finally began to move off, on July 30th, 1877, the infantry of the preparatory combat would certainly have performed their task, and the decisive attack, launched about three in the afternoon, would have had ample time to bring matters to a conclusion before nightfall.

Our preparatory combat has produced the desired result ; it has immobilised the defence along its front ; it has worn it out by fire and by continuous local attacks ; lastly, the commander of the force has had the situation cleared up for him. A gap has been formed in the southern section, and there remains only the task of widening and deepening it, till it reaches the very heart of the defence. The supreme effort is now made with all the available reserves, which will be employed down to the last man if necessary. This is the final blow of the fist, which should knock the enemy down by striking him where he is weakest.

In the phraseology sanctioned by our regulations, this phase is termed the decisive attack. In the third battle we shall learn the mechanism of the decisive attack from Skobelev.

III.—THIRD BATTLE OF PLEVNA (SEPTEMBER 11TH, 1877).

A. THE EVOLUTION OF IDEAS AFTER THE SECOND BATTLE.

The painful experiences of the first two battles bore fruit in the minds of some officers, at least, who were quick enough to grasp the lessons taught them.

Thus, when General Imeretinsky advanced against Lovcha, he formed an *advanced guard*, which he placed under the command of General Skobelev.

"General Skobelev's orders were (1) *to gain possession of the heights* before Lovcha so that they could be occupied by our batteries ; (2) to carry out the necessary preparatory measures ; that is, to reconnoitre the position, take ranges, decide the number of guns to be brought into action to shell the enemy's position ; and, lastly, if possible, to construct shelter trenches and epaulments " (General Imeretinsky's report).

On his part, General Skobelev made certain proposals to General Imeretinsky, which emphasised the necessity of the following points :—

- (a) "Exact information about the ground and the enemy's position should first of all be obtained."*
- (b) "The attack should be carefully prepared by artillery."*
- (c) "The subsequent advance should be made gradually."*

We see here how the error of preparation by artillery alone is persisted in. As a result, when the fight began, the detachment carried out a useless bombardment which lasted from 5 A.M. till mid-day.

* Major Bonneau—*Guerre Turco-Russe*.

- (d) "All successive positions should be placed in a state of defence, from those occupied at the beginning of the fight to those captured from the enemy."*

This is the way to carry out the preparatory combat with sure and certain progress: in the attack on Lovcha, the Russians made sure of all ground gained, by constructing cover for the infantry and guns. Their newly acquired education will stand them in good stead later.

- (e) "Strong reserves should be told off, and they should be used sparingly."*

Skobelev at least had learnt this lesson; he wished for strong reserves and held that they should be kept for the decisive action.

- (f) "The enemy's weak points should be sought for."*

There was to be no longer any idea of a strategical or tactical key; nor were troops any more to be wasted against the strongest point. The weak point was to be sought for, where the line of defence could be broken by strong reserves. Where this point was, the fight would disclose. Lastly, it is seen how, in his order for the attack, Skobelev insisted on the necessity for combined action between the infantry and artillery, and he also showed the way in which this combination could be worked. This was necessary, because his troops had not been educated on these lines. Did the Russian gunners understand and did their action correspond to their chief's wishes? It is impossible to say, for habits once adopted are not easily changed.

B. THE SITUATION.

The Entrenched Camp of Plevna.—Osman Pasha's army had increased considerably between July 30th and September 7th, when, for the third time, the Russian army stood before Plevna. Advantage had been taken of the interval to complete the works of the entrenched camp. The fortifications consisted of a series of redoubts of high relief (shown by the figures on Map 2) and the greater number of them were armed with guns. These redoubts were connected by trenches, in front of which were one or more lines of trenches or rifle pits. In the southern section the defenders had pushed out their works as far south as Hill 315, for its occupation by the Russians on the previous occasion had had dangerous results for the defence.

The south-western section had been particularly strengthened. It was on part of a vast plateau on which stand the villages of Brestovitse and Krishin. From the Krishin plateau four spurs jut out towards the west. The Russians called the first three, the first, second, and third spurs. The fourth spur, which is divided from the third by a stream, they afterwards called Mount Skobelev.

* Major Bonneau—*Guerre Turco-Russe.*

On this spur there were two redoubts (7 and 8); on the plateau four redoubts (9 to 12). Only the two most northerly ones were provided with guns on the day of assault. The hill to the south-west of Brestovitse was bare; the first, second, and third spurs were covered with vines and fruit trees.

In the opinion of the Turks the ground between the Vid and Krishin was so covered by woods that a serious attack could not be expected on that side, and no works were constructed on it.

Turkish Force.—Osman Pasha's force at the third battle of Plevna consisted of 45 battalions, 12 to 14 squadrons of cavalry (including irregulars and Bashi-Bazouks), and $11\frac{2}{3}$ batteries. Total, 35,000 men and 70 guns.

RUSSIAN AND RUMANIAN FORCES.

	Battalions.	Squadrons.	Guns.
Russians—			
IV Corps	20	12	100
IX „	21	16	88
Imeretinsky's detachment	20	16	90
Siege Park	—	—	20*
3 cavalry regiments of the VIII and IX Corps with 2 batteries	—	12	12
Cossack Brigade	—	7	6
9th Regiment (3rd Division) and 1 battery	3	—	8
Battalion of engineers	1	—	—
Rumanians—			
Three Divisions	42	32	120
Total	107	95	444

* Large calibre.

A total of about 100,000 men, with an effective of 82,000 rifles and 11,000 sabres. A battalion had consequently about 770 men, and a squadron 115 sabres.

The whole of the above force was placed under the command of Prince Charles of Rumania; he had as his Chief of the Staff the Russian General Zotof who issued orders direct to the Russian troops.

The Orders for the Advance (See Map No. 1).

The orders for the advance were as follows:—

The three Rumanian Divisions, on Grivitza, and to the north of the road from Bulgareni.

The IX Corps, between the roads Plevna-Bulgareni, and Plevna-Pelishat.

The IV Corps, on Radishevo.

Imeretinsky's detachment, on Tuchenitsa.

General Loshkareff's cavalry division, to the right of the IX Corps, connecting it with the Rumanians.

The Rumanian cavalry, to the extreme right.

The cavalry of the IV Corps and the Cossacks, under General Leontieff, on the left flank.

The 9th Regiment, on Bulgareni.

The battalion of Engineers, divided between the different corps.

The general reserve, to the west of Pelishat.

C. SUMMARY OF THE BATTLE.

According to General Zotof's official report, the fundamental principles of the attack were as follows: a preparatory bombardment to be continued as long as possible against the enemy's fortifications, and to increase in intensity the nearer the artillery got to the enemy; an advance of the infantry under cover of the ground; and, finally, an attack in full force.

1. *The Bombardment.*

The deployment of the great part of the artillery was effected on the night 6th to 7th September. The operation was crowned with moderate success.

The whole of September 7th and 8th were devoted to a bombardment of the Turkish positions, the share taken by the 20 siege guns being especially prominent. The general attack was to have been ordered for the 9th, but on the evening of the 8th the bombardment, though incessant, had produced no results. The attack was therefore postponed and the bombardment was continued throughout the 9th and 10th. On the 10th it was seen that the four days' bombardment had had no result, that nothing had been accomplished, that the attack was not prepared, and that the infantry was not weakened. On the other hand the Russian artillery wagons would soon be empty and could not be replenished owing to the difficulties of transport. On this painful conclusion it was decided to attack on September 11th, solely to avoid the disastrous moral effect of a retreat without an engagement. What was worse, after ordering the attack to begin at 3 P.M., the artillery were directed to carry out during the morning a series of bombardments, "in the hope of drawing the Turkish reserves under fire." The reserves, however, as they were not threatened, remained under cover and the Russians continued to uselessly empty their ammunition wagons. What protection could an exhausted artillery afterwards afford its infantry at the critical stage?

2. *Résumé of the General Order for the Attack.*

The attack will be prepared by an intermittent general bombardment which will last—

1. From dawn to 9 A.M.
2. From 11 A.M. to 1 P.M.
3. From 2.30 P.M. till the position is captured.

The general attack will take place at 3 P.M.; the distribution of the force is as follows:—

Eastern Section.—1. The three Rumanian Divisions under General Chernat (42 battalions).

2. A brigade of the IV Corps (six battalions) will protect the left flank of the Rumanians and will attack the Grivitsa redoubt from the south-west with two battalions. (The brigade commander is not under the orders of General Chernat.)

Southern Section.—Under the command of the General Commanding IV Corps: one brigade of the 16th Division (IV Corps), supported by a brigade of the 30th Division (IV Corps). Total, 12 battalions.

South-Western Section.—Commander, General Skobelev; one brigade of the 16th Division (IV Corps), the brigade of Rifles; a regiment of the 2nd Division (Imeretinsky's detachment) and four batteries. Total, 10 battalions.

Special reserve under the orders of General Imeretinsky (independent of Skobelev), the rest of the 2nd Division (21 battalions).

Two regiments of the IX Corps will protect the artillery.

The general reserve (only three regiments of infantry and three batteries, or but one-twelfth of the infantry) will follow in rear of the central column of the southern section.

General Leontieff's detachment will cover the left flank and will operate along the Sophia road (south-western section).

General Loshkareff's detachment will act on the right bank of the Vid and will try to cut the enemy's communications.

To sum up:

On the east front (Grivitsa), there were 48 battalions under two independent commanders.

On the south front there were 12 battalions followed by the General Reserve of 9 battalions. Total, 21 battalions.

On the south-west front, there were 10 battalions with a local reserve of 21 battalions, each portion under an independent commander. Total, 31 battalions.

After the battle, which revealed the possibility of forcing Plevna from the south-west, the official report stated that the principal attack was considered to be the one against the Green Mountains, on the south-western front. The distribution given above shows that this was not the General-in-Chief's intention when he allotted the troops.

Further, he was unable to modify his original plan to any great extent, for he had scarcely any strength at his own disposal in reserve. He remained hypnotised by what was going on in the southern section. It was evident that the night before the battle he continued to believe the Grivitsa redoubt to be the key to the position, and accordingly told off to that section 48 battalions out of 106, or almost as many as in the other two sections combined.

We will now rapidly follow the progress in each of the three sections.

3. *The Action in the Eastern Section.*

Objective: the Grivitsa redoubt. We have seen that the idea of the Russian commander was to send forward the infantry during the artillery preparation. In this there was a vague idea of a preparatory combat, and though it was still very confused, yet the Rumanians appear to have understood it, and made strenuous efforts to carry out their chief's wishes.

Accordingly, during the bombardment, they engaged with first one and then a second division. On September 8th, the fire of the batteries cleared a Turkish trench about 1,100 yards in front of the redoubt. The Rumanians immediately occupied it with their infantry and even brought up a battery. On the 9th the village of Grivitsa was occupied by the IX Corps. On the 9th and 10th the Rumanian infantry endeavoured to make further progress. In short, when the general attack was timed to begin, the Turkish redoubt was already invested on its eastern front at rifle range. The preparation for the final assault, therefore, was made, not by the inefficacious fire of artillery alone, but by rifle fire and by the constant menace of an attack which forced the Turkish infantry to expose themselves to the Russian shells. The enemy was immobilised, and the destruction of their material and moral force had begun.

On September 11th, at the hour ordered, the redoubt was attacked in front by the 4th Rumanian Division in three lines, and later on the north by a brigade of the 3rd Rumanian Division, and finally, too late perhaps, by the Russian brigade. The redoubt was carried by 6 P.M.; 31 battalions had been engaged, while 17 had not fired a shot.*

The attack had succeeded, but at great cost; 3,588 men were killed and wounded, or about 15 per cent. of the infantry engaged, if we suppose the whole of the losses to have been confined to that arm.

4. *Action in the Southern Section.*

At 1 P.M., long before the time ordered for the attack, the 16th Infantry Brigade was formed up in front of Hill 315, the two regiments (63rd and 64th) being abreast of one another.

While the officer commanding the 63rd Regiment was issuing his instructions, his leading battalion, by some misunderstanding, advanced prematurely without orders. The other two battalions of the regiment followed the movement, got rapidly mixed up with the firing line, and with some loss reached within 200 yards of the Turkish trenches. Here the regiment was checked, but continued the fire combat at short range. It maintained its precarious position till the 117th Regiment (30th Division) advanced in its turn and carried forward the firing line close up to the defenders' trenches. Then there followed a rifle duel at almost point-blank

* According to some accounts 24.

range, but the Russian troops, who had no cover, suffered severely. Feeling that there were no troops behind to support them, they gave way and retired in disorder. They experienced the heaviest losses in their retirement on account of the accurate shooting of the Turks, to whom, as there was no fire in return, it was mere target practice. Two regiments were almost annihilated, the 63rd and the 117th; the 63rd alone lost 43 per cent. of its officers, and 49 per cent. of its men.

At the beginning of the action the 64th Regiment was on the left of the 63rd. Two companies of the former advanced at the same time as the 63rd, carried away probably by their example.

These two companies "got within 300 yards of the trenches where they were under cover of the ground. They expended all their ammunition, sent men back, many of whom were killed, to get more, and when that was finished and they had received no orders, they decided about 2.30 P.M. to retire" (Major Bonneau).

Towards 3 P.M., the 64th Regiment, supported in rear by the 118th, was sent forward against a body of the enemy which was in position on the western side of Hill 315. This regiment advanced in the customary formation of the Russian infantry, "two battalions abreast in two lines of company columns, each battalion preceded by its rifle company, while the third battalion formed the reserve" (Major Bonneau).

At 600 yards from the enemy the two leading battalions of the 64th Regiment were already mixed up in one firing line, and managed to carry the first line of the enemy's trenches; the attack did not last more than 15 minutes. A second line of trenches was also carried but the Russians stopped worn out in front of the third. There was nothing in rear of them, for the third battalion had marched off to the left towards the Tuchenitsa, and the 118th had moved to the right towards the redoubt which crowned the eastern part of the hill. "As their ammunition was exhausted, and their front and flanks were attacked by the Turkish reserves, the companies of the 64th Regiment began to retreat, leaving 606 men on the ground. The 3rd battalion of this regiment tried to effect a diversion in the valley of the Tuchenitsa, but it was without result and ended in the loss of 75 men.

"The 118th Regiment, which was directed against Omer Tabia (Redoubt No. 13), was halted a short distance from the redoubt and began to open fire; but it sustained heavy loss and was not long in beating a retreat without attempting an actual assault. It left 415 men on the ground.

"Towards 4 o'clock General Zotof decided to place at General Schnidnikoff's disposal the 123rd and 124th Regiments (31st Division) and the 20th Regiment of the 3rd Division; this last belonged to the general reserve.

"When the 124th was ordered to advance against Omer Tabia, the four preceding regiments had already received a decided check. It marched straight for the redoubt, but could not carry it, and

retired with the loss of 800 men. The 20th Regiment was immediately afterwards launched to the attack but met a similar fate " (Major Bonneau).

The losses in the southern section amounted to 115 officers and 4,319 men, or from 27 to 28 per cent. of the troops engaged. The failure in this section was more costly than the success in the eastern; the greatest losses were sustained during the retreats.

5. Action in the South-Western Section.

We must now go back a little to show how the phases of the battle in this section were understood by General Skobelev. This general, who was still quite young, was in every sense a leader of men. His troops adored him and believed in his fortune; his mind was ever quick to profit by experience, and his tenacity was unconquerable. Also success always crowned his action. In the present case it was but a partial success for the whole army, but it was undeniable for all that. On September 7th, when the attack on the Plevna position began, Skobelev commanded the leading échelon of General Imeretinsky's detachment, that is to say, an advanced guard. On the same day, while the Russian infantry looked on at the useless bombardment with ordered arms, Skobelev seized the village of Brestovitse, garrisoned it, and placed 20 guns covered by epaulments on the open slope to the south-east of the village.

The date of the assault had been fixed by the Commander of the Russian forces for the 9th September. On the 8th, Skobelev continued his preparatory combat by advancing and gaining possession of the second spur of the Green Mountains. For various reasons, but chiefly because he was informed that the assault was postponed, he abandoned this spur, but fortified himself strongly on the first spur, digging trenches and throwing up earthworks.

On September 10th the preparatory combat continued; the second spur was taken and immediately fortified.

During the night, September 9th—10th, the order was received for the general attack to take place the next day.

On September 11th the preparatory combat was renewed at 10 A.M., and the third spur was carried. Here the troops entrenched themselves as well as they could with the few entrenching tools available. Finally, at the appointed hour (3 P.M.) Skobelev launched his decisive attack.

We will return later to this lengthy preparation for the decisive attack, because it exemplifies admirably the characteristics of this phase of the battle.

The Decisive Attack in the South-Western Section.

The first point to be decided was the objective for the decisive attack; whether it should be the Krishin group of works, or the redoubts on Mount Skobelev (Nos. 7 and 8).

"If the works, which were very strong and mutually supported each other, were to be attacked, the whole of the left wing would have to be employed for the purpose, and there would be no troops available to connect with the centre on the Tuchenitsa. If the main attack were directed against Mount Skobelev, it would be connected with the centre, would be assisted by the fire of the latter, and at the same time assist its attack. On the other hand, if the Krishin redoubts were neglected, the artillery there would take in reverse the works on Mount Skobelev, supposing the latter were captured by the Russians" (Major Bonneau).

Nevertheless, Skobelev adopted the bolder measure of attacking Nos. 7 and 8 Redoubts, for he considered that the capture of these works would decide the fate of the Krishin redoubts, and would at the same time lead straight at the heart of the defence.

The preparatory combat, moreover, had enabled him to establish himself on the third spur, or within 1,300 yards of his objective. We will now see how the attack was organised.

Strength.—On the 11th Skobelev had the following troops under his command :—

One brigade of the 16th Division (IV Corps) (the 61st and 62nd Regiments).

One brigade of Rifles (9th, 10th, 11th, and 12th Battalions).

The 7th Infantry Regiment.

4 Batteries.

Total, 13 Battalions and 4 batteries.

In rear was the rest of the detachment under General Imeretinsky, who was ordered to support Skobelev.

On the left, forming an independent command, were the cavalry under General Leontieff.

Organisation of the Attack.—After the capture of the third spur, General Skobelev formed up his troops and those sent him by General Imeretinsky in the following order :—

In the first line, on the third spur, from right to left, were the 10th and 9th Battalions of Rifles and the 61st and 62nd Regiments. The whole of these troops had been employed in the capture of the third spur and in placing it in a state of defence.

In the second line, in rear of the third spur, was the 7th Regiment.

In the third line, behind the second spur, were the 11th and 12th Rifle Battalions and the 6th Regiment.

We see how the troops were disposed in depth. Each line was probably also formed in two or three *échelons* according to the normal deployment of the Russian infantry, of which the formation of the 63rd and 64th Regiments, in the central section, has been given as an example.

Two battalions of the 5th Regiment and two battalions of the 8th Regiment held an entrenched position on the second spur, and finally one battalion of the 5th Regiment occupied Brestovitsa village.

These battalions formed the garrisons of the *points d'appui* captured in the preparatory combat and now strengthened by field works.

The left flank of the attack was covered by a battalion of the 8th Regiment, the right flank by two and a half companies of the 6th Regiment. Thus the infantry of the attack furnished their own immediate flank protection.

Besides this, the left flank, which was particularly exposed, was protected by the cavalry under General Leontieff, and the right by the troops of the southern section.

General Skobelev's artillery, reinforced by General Imeretinsky's, was disposed in the following manner.

First, there was a central mass, formed by two and a half batteries on the third spur, three batteries on the second spur, and, in rear of the first spur, three batteries forming a reserve. All these batteries could see the objective of the attack, and some of them the Krishin redoubts.

Then there were two flanking groups. On the right, on the right bank of the Tuchenitsa, was a group of 12 (or 14) guns; their position was chosen by the general the night before. On the left were two batteries of horse artillery from General Leontieff's cavalry; these were in action at first to the north-west of Brestovitse, but towards the end of the day were moved up near the third spur.

By these dispositions the different duties of the artillery could be fulfilled. A certain number of guns on the third spur (counter-batteries), could engage the guns in the redoubts. Other batteries, and these were the most numerous, were entrusted with the task of clearing the way for the infantry as far as their almost exhausted ammunition would permit. These breaching batteries included those on the second spur as well as some of the guns on the right bank of the Tuchenitsa. Finally, a certain number of guns on the third spur, close up to the infantry, were detailed to move up as rapidly as possible to the enemy's position directly it was captured ("accompanying batteries").

The attack was therefore perfectly arranged :—

Mass.

Depth.

Flank protection by artillery and infantry.

The artillery had its different missions assigned to it.

Important positions captured from the enemy were placed in a state of defence.

Connection was maintained with the troops on either side.

The factor of surprise only was missing, but in this case it was not possible.

At 3 o'clock the attack was put in motion; the first line cleared the crest and descended the glacis in front with some loss. When it reached the brook at the foot of the hill, it was checked by the enemy's fire and was unable to advance. An impulse from

the rear was wanted, and it was supplied by the 7th Regiment. With this aid the attack gained a little ground, 200 or 300 yards, and reached the middle of the slope rising towards the enemy. It was again checked and there were signs of a retirement. Skobelev called up his last line, the 6th Regiment and the Rifle battalions, and again an advance was made which almost carried the line to the edge of the ditch. But the impulse given was insufficient and there were no more troops to give a further one. The *mass* of the attack was not sufficiently powerful, and it had not the necessary depth to carry the onward movement to its goal.

Then a fresh factor intervened—the moral impulse of the commander; the General put himself at the head of his troops, his horse was shot, but he sprang to his feet, and led his cheering men into No. 8 Redoubt.

The enemy's line was pierced at one point; it was then 4.30 P.M. In the meanwhile a Turkish counter-attack had driven back the right wing, and, to carry it to the front again, a fresh reinforcement was necessary. This was furnished by three fresh companies of the 6th Regiment and by two companies improvised from stragglers of the 62nd Regiment who had either retired from the fight or had been left in rear. At 6 P.M., thanks to this reinforcement and also to the progress made by the troops which had captured No. 8 Redoubt, Redoubt No. 7 also fell. The position given to Skobelev as an objective had been captured; the decisive attack had therefore fully succeeded.

The situation, however, was still critical; there were no reserves left, and the troops were exposed not only to fire in front but to artillery fire from the flank to which they could not reply, owing to the limited range of their rifles. Artillery was urgently required in the redoubt.

"In order to silence, if possible, the guns in the Krishin redoubt, I ordered the officer commanding the 2nd Battery, 2nd Brigade (Lieut.-Colonel Baumann), to send up four of his guns to No. 8 Redoubt" (Skobelev's report). We see that the chief task of the artillery told off to accompany the infantry attack is to draw off from the latter the fire of the enemy's guns. The more guns acquire a rapid destructive power, the more important it is not to lose time but to hurry up the artillery.

Let us now see the result. "The appearance of these guns in the redoubt could not have been more opportune; our men in the work greeted them with cheers of delight, especially as thick lines of skirmishers could be seen advancing from the Krishin redoubt. These were soon followed by strong columns which attacked our left wing. Our men received them with rifle fire and Captain Vasiliev's guns opened on them with shrapnel. The enemy halted at 150 yards from our position, and, after sustaining considerable loss, began to retire" (Skobelev's report).

No one after reading these lines could deny the imperious necessity of immediately sending up artillery to the infantry position.

Other batteries ordered up the following day were unable, owing to the weakness of their teams, to get their guns up the extremely steep slope which led to the redoubts.

Skobelev's detachment, after capturing the redoubts, had now to maintain its position for nearly 24 hours, that is, throughout the night and for a greater part of the next day. It had to rely on its own resources, and was continuously attacked in front and on both flanks by Turkish forces which, no longer immobilised in the other sections, could concentrate in the south-western.

The story of the fights during the night of September 11th—12th and on the following morning is of thrilling interest. The bull-dog tenacity and obstinate heroism of General Skobelev and of his brilliant Chief of the Staff, Captain Kuropatkin, and the heroic courage of the Russian infantry should fill with admiration all who study this episode of the fight. But, as it is useless for our conclusions, we must pass it over in silence.

On the evening of September 11th, the Russians were within an ace of capturing Plevna; one more rush, one more reinforcement of a few battalions, and the place would have fallen. Skobelev begged and prayed for more men, but none came. Not till the following day was a regiment sent to support him, the unfortunate 118th, which had already been severely tried in the southern section. It came up only in time to cover his retirement.

And yet, out of the total force, there were 34 battalions which had not been engaged, of which 17 were Rumanian.* It certainly would not have required this number of troops for Skobelev to have entered Plevna, for even on September 12th the Turks at one time thought the day lost. Unfortunately the Russian Commander had not kept these troops at his own disposal as a strong general reserve.

D.—REMARKS ON THE THIRD BATTLE.

1. *The Generalship.*

The Commander-in-Chief divided almost this entire force between his subordinate commanders and their sections. The very weak general reserve which he retained, only allowed him to intervene in matters of mere detail. He could not profit by the advantages gained either in the eastern or south-western sections to snatch the victory which escaped him; and yet about one-third of his infantry had not been engaged.

Skobelev's superb resistance after the capture of Nos. 7 and 8 Redoubts and during the 12th September, gave the commander a great opportunity. Had the latter had strong reserves, they would have enabled him to achieve final success, not only on the evening of the 11th, but also throughout the morning of the 12th. But the Russian Commander had no more troops at his disposal,

* According to some reports 41, of which 24 were Rumanian.

and, not being able to reinforce Skobelev, he could not deliver the final blow which would force the gate of the resistance. And this is not all; for, by completely abandoning the engagement in the centre, he allowed the Turks to overwhelm his lieutenant. The lessons from previous events had not been mastered.

A general who does not retain strong reserves abdicates the command.

In each section the command was divided between several generals, each independent of the others. It was only a quite remarkable sense of joint responsibility that prevented this confusion of power from having disastrous results. This spirit was especially noticeable in the three commanders of the south-western section; but one of them, Skobelev, was of powerful individuality and imposed his will on the others. It is impossible to make sure of such loyal *camaraderie*, and in practice it is better to organise the different commands separately and to define the responsibilities of each.

One cannot but be struck with the way in which the Russians altered their order of battle and transferred troops from one general to another.

For example, on September 11th, the IX Corps furnished a brigade to the south-western section, 2 regiments to the general reserve, and 2 regiments to protect the artillery; the command therefore ceased to exist.

General Skobelev had successively at his disposal the following troops:—

On September 7th, the 5th and 8th Regiments from two different brigades of the 2nd Division, and the 9th and 10th Rifle battalions.

On September 9th, the 2nd Brigade of the 2nd Division (7th and 8th Regiments), the 9th and 10th Rifle battalions, and finally the 2nd Brigade of the 16th Division (61st and 62nd Regiments) (IV Corps).

On September 11th, the 1st Brigade of the 16th Division (61st and 62nd Regiments) (IV Corps), the 7th Regiment, and the 9th, 10th, 11th, and 12th Rifle battalions.

In spite of these changes, Skobelev could exalt and carry with him all these different units, some of which knew him only by reputation. In this there is proof of his extraordinary power of moral ascendancy. Every man followed with enthusiasm the White General, the invulnerable, and invincible. Such conditions cannot always be counted on and yet it is possible that we in France exaggerate the difficulties for a commander to gain rapidly the blind confidence of his troops. Confidence in a general is essentially a feeling which is communicated, and it is one of the most powerful instruments in war.

The Commander-in-Chief had still no conception of the rôle of an advanced guard, for, as in the two preceding battles, there is no trace of one to be found. Perhaps the information which the Russians had about the Camp of Plevna was precise enough to explain, if not to justify, this omission. Only with Imeretinsky's detachment was there an advanced guard, at Lovcha and at Plevna.

2. *The Preparatory or Wearing-out Combat.*

In the eastern section the attack attained its objective which was the Grivitsa redoubt. This success was due to overwhelming numerical superiority; to the accord which seems to have existed between the Rumanian infantry and artillery, and certainly also to the previous advance of the infantry and their co-operation in preparing the attack. The result shows also that the Grivitsa redoubt, the famous *key* to the position, was the key to nothing at all. For possession of it was maintained after the general retirement, and it did not contribute to the fall of Plevna.

In the southern section there was no sort of preparatory combat, as understood by Skobelev, and as indicated in our "Duties of the Army in the Field." After a useless preparatory fire by the artillery, a decisive attack was made, to which we shall refer later. No attempt was made to immobilise the enemy, to wear him out, to constantly menace him, and to hold on solidly to the ground gained. The result was that after the failure of a premature attack, the enemy were able to move the garrison of that section of the defence, and, with the garrison of the northern section which was not threatened, to form the enormous reserve which overwhelmed the victor in the south-western section.

But for this, from the Russian point of view, unfortunate intervention, it is very probable that Skobelev's force would have been strong enough to have pushed on to Plevna. But to do this, it was necessary for the Russians in the southern section to have had a clear conception of the preparatory combat. They certainly had not, and we shall find the same thing in the Transvaal.

3. *The Decisive Attack.*

In the southern section, as we have seen, a decisive attack was launched immediately after the bombardment. This attack was formed by successive waves with a considerable distance between them, each wave coming up when the one in front was expended, annihilated, or in flight. For example, the first wave, consisting of the 63rd and 117th Regiments, came up at 1 or 1.30 P.M.; the second wave, consisting of the 64th and 118th Regiments, about 3 P.M.; the third wave, the 133rd and 144th Regiments, at 4 P.M.; and later, the fourth wave, the 20th Regiment.

The result was a complete check. The fire of the wave which was stopped could not cover the formation and advance of the wave behind, which came to grief at the same place, and for the same reason, as the one in front of it.

The conclusion is that successive waves should follow closer to one another. We find here an absolute condemnation of the theory which advocates launching successive waves with great distances between them, each wave to advance when the one in front has done its utmost, that is to say when its power is expended. This, nevertheless, is proposed by some people as the tactical procedure

of the future, and they credit the idea to the Germans as a consequence of the improvement in modern fire arms. (Vide Part IV, B, 2.)

We may here observe, as at the second battle, the faulty arrangements in the attack, which made no provision for protecting the flanks. Consequently, when the 64th, followed by the 118th Regiment, was sent forward to attack Hill 315, the rear battalion of the 64th was compelled to turn off to the left, and the whole of the 118th to the right. By doing this they unconsciously protected the flanks, but an unnecessarily large force was thereby employed for this duty. The result was that, after brilliantly carrying two lines of the defence, the attack was stopped in front of the last, because there was no impulse given to it from the rear.

In the south-western section Skobelev's plan of attack was daring, if not to say rash. By thrusting himself into a re-entering angle in the Turkish position and going straight for his objective, he left on his left the four redoubts on the Krishin plateau, and on his right the works on the right bank of the Tuchenitsa and the battalions which were guarding the bridge over the river. The General had no doubt of success, and he was right. He did not believe in the *invulnerability* of the enemy's front, even though his conditions were not the most favourable. He organised his attack as well as he could, pushed it home, and succeeded.

His attack attained its objective and held on to it in spite of the fact that it was made against powerful field works in which the defenders were armed with rapid-loading rifles which were far superior to those of the Russians, and were supported by an artillery which had sustained little hurt. Moreover his attack was indifferently supported by his own artillery which had spent most of its ammunition, and was made by 22 battalions against a force which, taking one time with another, amounted to 30 battalions or their equivalent in effectives. Ought we not after an example like this to set our faces against the false, enervating and demoralising theory of the impossibility of a frontal attack? In every campaign there have been badly conducted attacks, which have failed and have caused very serious losses; but are we for this reason to conclude that the offensive is impossible? This erroneous conclusion was drawn by us from the campaign of 1866, and led us to adopt, in 1870, the tactical defensive which stood us in such bad stead. Did we not after the war of 1870-71 again extoll the defensive and proclaim aloud the impossibility of a frontal attack, because the Guards were repulsed at St. Privat? How did this repulse occur? Exactly in the same way as in the southern section at the second and third battles of Plevna. After an artillery engagement, and without any previous action by the infantry, the Prussian Guard made nothing less than a decisive attack in a dense mass; and it met with the fate it deserved. However, the sacrifice, costly though it was, was probably not without its uses to the Germans. The Guards' firing line was checked within short rifle range of the defence and unintentionally continued a

preparatory combat, the fire of which certainly aided the advance of the XII Corps. The latter then made the real decisive attack, against an enemy which was immobilised and of which the wearing-out had begun.

The successive repulses of the Germans on August 18th on the right at St. Hubert and on the left at St. Privat, were due to the same causes as the repulses of the Russians at Plevna. In one case as in the other, the decisive attacks were not preceded by "the serious and laborious" preparation of the preparatory combat.

What was the battle of Woerth except a frontal attack, almost up to the last phases? And yet what was remembered after the war? Only the repulse of the Guards at St. Privat; and conclusions were drawn from it which are disproved entirely by the battle of September 11th, 1877; by the action of the Rumanians in one instance, but above all by General Skobelev's detachment.

Again, after the Russo-Turkish war, many tacticians only thought of the failures of the Russians, which were quite deserved, and forgot the lesson taught by Skobelev. Those who had taken part in the war and eye witnesses, like General Dragomiroff for example, set themselves, however, against the enervating conclusion of the theorists and upheld the attack, even a frontal one if necessary.

It is so after every campaign, and it seems to be an inevitable tendency. The mind is struck with certain facts, does not study the causes sufficiently, and draws the same conclusions after each war. These are always proved to be false in the next war, if it is conducted by men of genius and strong will.

If a general were to make an attack at the autumn manœuvres in the same conditions as the attack on Mount Skobelev, there could hardly be sufficient abuse found for him, because people do not understand how great is the moral effect of a mass which is stopped by nothing, provided it desires to reach its object and receives constant impulse from the rear. We will explain later what is meant by these expressions, *mass* and *impulse*. Complete success was achieved on the Green Mountains because the conditions of the fight were properly understood; thanks to the commander, there was perfect unity of action between the arms, infantry, cavalry, artillery, and engineers (the infantry acted as the last); finally there was the *moral force* which a leader of men can produce. In France, leaders of men are not wanting; let us follow them and shut our ears to the theories of superficial minds who do not scrutinize facts carefully enough, do not distinguish their real causes, and, therefore, draw false conclusions.

Certainly the losses in Skobelev's detachment were very heavy, about 35 per cent. of the effectives engaged. But all reports are quite unanimous in assigning the greater part of these losses, first to the long fight on the defensive which the Russians had to sustain when left to themselves, and secondly to the retreat. If a final impulse had been given by a strong general reserve on the night of the 11th, it would certainly have been less costly and would at the same time have gained a victory.

4. *The Effectiveness of Long-range Fire.*

As might have been expected, while the campaign was going on and after its conclusion, various tacticians at once exaggerated the effect of long-range infantry fire, and their natural conclusion was that the defensive had the advantage. A more careful examination of actual facts reverses this conclusion. We have seen that at the third battle, as well as at the first two, the Russian infantry had no difficulty in getting within quite short range of the Turkish works. In the southern section, the 63rd Regiment approached to within 200 yards of the trenches; a single company of the 64th got to within 300 yards of the enemy's position, and there are other examples. We have not time to follow up the various incidents of the fight, but, if we did, we should find the same thing occurring constantly. In the south-western section, the first line of the decisive attack started at 1,300 yards from the enemy, and was not checked till it had got within 300 yards. It therefore covered 1,000 yards without being stopped, even though it had no covering infantry fire to assist its advance. If long range infantry fire was sometimes effective, it was during a retreat, for the Turk then had complete possession of his nerve and could utilise fully the extreme range of his rifle. Under the fire of the attack, or when menaced by it, the defenders' fire was not so efficacious.

5. *The Bayonet Fight.*

As early as after 1870, the bayonet was held in question. Nothing was of any value except fire; there was to be no shock-combat in future. The bayonet, nevertheless, still played its part seven years later, though the rifle by that time had undergone great improvements. The two infantries charged one another in spite of theories to the contrary, and hand to hand fights were common enough for the Russian infantry to realise that the point of the bayonet was much surer than the bullet.

6. *Artillery Action.*

There is no need to revert to the powerlessness of field artillery against troops under cover, who are not threatened at the same time by infantry. The Russians thought that they would settle the difficulty by bringing up heavy guns, but were disappointed in their hopes. The heavy gun failed against field entrenchments, as might easily have been foreseen. It does not require a shell of 60 to 80 lbs. to make a hole in the parapet of a shelter trench, a shell of quite small dimensions will do this. But for every fortunate shot, that would perhaps kill two or three men, an enormous number of these heavy projectiles would have to be fired, which would very soon empty the ammunition wagons. It is like taking a club to kill a fly; and one has a very good chance of missing the fly.

7. *Field Fortifications.*

The great value of light field works was certainly a new factor which the actions round Plevna brought to light. The increased power of field works grew with the power of infantry fire. This is an important fact and one which must be taken into account.

Even the assailant is forced to have recourse to field works in the face of the deadly effects of the rapid-loading rifle, which are incontestable. Skobelev never advanced a foot without making sure of his position by field fortifications. Though he took the utmost risks he always impressed on his troops the necessity of constructing cover. In all his reports he complained of the insufficiency of the entrenching tools carried by the infantry, and his Chief of the Staff did the same.

Gourko, later on, was in command of an expedition of an essentially offensive character; he insisted on having two battalions of engineers instead of one, which was the original proportion allotted to him.

If we consider in how short a time the Russians ultimately were able to construct very efficient cover, although they were poorly supplied with the necessary tools, we shall come to the conclusion that the rapid construction of field works, which are of such high value nowadays, is quite as much a factor at the disposal of the attack as it is of the defence. It allows the attack to firmly establish itself at each stage of its progress. Skobelev understood this and made use of all the advantages that the offensive could gain from this new feature in war. The same could not be said of the Russians in the other parts of the battlefield, for they did not understand how to make profitable use of a new factor. This factor, however, does not change the *principles* of the fight, it merely modifies the *methods*. This is almost always the case, though the law is too often forgotten. People are always seeing a revolution in the art of war, whereas all that is happening is a mere evolution of tactical methods.

SECOND PART.

THE PREPARATORY COMBAT AND THE DECISIVE ATTACK ACCORDING TO THE DECREE OF MAY 28TH, 1895, ON "THE DUTIES OF THE ARMY IN THE FIELD."*

A more detailed study of General Skobelev's operations will enable us to understand how judicious are the general principles laid down in our "Duties of the Army in the Field," as regards the two most important phases of the battle when contact has once been gained.

These phases are :

The preparatory combat; and
The decisive attack.

A. THE PREPARATORY COMBAT.

We have sketched roughly, in Part I, the fight, from the capture of Brestovitse village to the occupation of the third crest, which was Skobelev's preparation for his decisive attack. We will return now to the details of the operations, as they enable us to point out the characteristics of this phase.

We will pass by the action of the advanced guard at the capture of Brestovitse, at the conclusion of which the General took steps to maintain the position he had gained. He placed it in a state of defence and constructed batteries for 20 guns on the hill to the south-east of the village.

The *general attack*, according to the Russian Commander-in-Chief's idea at this time, was to take place on the 9th. General Skobelev determined to *prepare* it, not by a useless bombardment only, but by *combat*; by approaching the enemy's position, and by solidly fortifying all ground gained. He therefore attacked the second spur of the Green Mountains on the 8th.

The Attack on the Second Spur.—The following is an extract from General Skobelev's report:—

"After a preparatory fire by the artillery, which lasted till 3 P.M., the 5th Regiment received the order to attack and carry the second spur of the wooded heights called the Green Mountains. The advance was made by the 2nd and 3rd battalions of this regiment, followed in reserve by the 1st battalion, at a

* Le Décret du 28 Mai, 1895, sur le Service des Armées en Campagne.

distance of half a verst (580 yards). The following troops formed the general reserve to the attack:—The 1st battalion of the 8th Regiment and four companies of the 2nd battalion of the same regiment (the rifle company of the 2nd battalion formed, with the 3rd battalion, the garrison of Brestovitse).

“At 4.10 P.M. the officer commanding the 5th Regiment reported that he was opposed by the enemy’s line which had opened fire at 500 yards, and that he was awaiting orders.

“I ordered the regiment to halt and went forward to examine the situation.

“When I reached the second crest I found that the 1st and 2nd battalions of the 5th Regiment had disappeared.

“The men were full of eagerness, and the colonel had retired wounded; the battalions on the initiative of their commanders had moved forward, and had attacked the third spur which was strongly occupied by the enemy. They carried the spur, and, in pursuit of the enemy, got possession of some rifle pits which were placed at the foot of the heights.

“When the enemy had recovered from the surprise of this sudden attack, they got together a considerable force of infantry and cavalry, and attacked our left flank and forced the 5th Regiment to abandon the trenches and to retreat.

“At this moment, the 3rd battalion of the 5th Regiment deployed by my orders in front of the second spur and covered the retirement; but it was attacked in its turn and driven back to the second spur; there, thanks to the support of several companies of the 8th Regiment, it was not only able to hold its ground but compelled the enemy to abandon the pursuit.

“The day cost us no less than 900 men, 700 from the 5th Regiment alone. Notwithstanding these heavy losses, the regiment was formed up after the fight on its original position by my staff, and, when they were ordered back to the main position, they retired singing.

“I took up a position on the second spur and reinforced the two battalions of the 8th Regiment by two battalions of Rifles; under the protection of these troops I collected the wounded. The night was undisturbed.”

Remarks.—The troops had been ordered to fortify the second spur directly they got possession of it; but the practices of an army are not suddenly changed in war time. General Skobelev chivalrously attributed his partial defeat to the absence of the colonel of the 5th Regiment, and to his not having himself reconnoitred the position with sufficient care; but it is certain that the repulse was due chiefly to his orders not having been obeyed, and to the thoughtless and headlong advance of his troops.

The actual capture of the second spur had not required the employment of more than two battalions*; but the errors committed by the troops engaged, necessitated, first the employment of the

* According to Kuropatkin, two battalions were not needed.

3rd battalion of the same regiment, and then of four other battalions, and so led to a premature waste of men.

It will be useful, in connection with this action of the 5th Regiment, to quote an extract from the notes of Captain Kuropatkin, who was Skobelev's Chief Staff Officer at the time and is now* the Minister of War in Russia. These notes, which were written from day to day, indicate clearly the fault committed and show us how the operation ought to have been carried out.

"To reach the second spur of these heights, nearly a verst (1,077 yards) had to be traversed across ground which, as far as one could see, was not held by the enemy. The regiment was ordered to gain *possession of the second crest and to fortify itself there.*

"The regiment advanced in wide and extended order, with two of its battalions in the first line, and with its third battalion in the second line; each battalion in the first line was in two lines of company columns, with their fronts protected by a thick line of skirmishers. The third battalion followed immediately behind in the same formation. In this manner the regiment crossed the open space, losing only a few men from artillery fire. The colonel rode at the head of the regiment eager for the fight, but he did not appear to pay any attention to what formation would be most suitable to the ground he was going to attack, nor to the strength and dispositions of the enemy; and it did not occur to him to keep the greater portion of his regiment in reserve to guard against eventualities.

"We had a second regiment of infantry and two battalions of rifles to support K——'s regiment, if necessary. The officer commanding the regiment should have contented himself with a skirmishing line formed by *a single company deployed at wide intervals*, with *two or three* companies in support, and the remainder in reserve as far off as possible from the skirmishing line. Unfortunately he started off, even when out of sight of the enemy, with ten companies in a single line. For the original formation of two lines of company columns became one line directly the officers relaxed their supervision. This is the natural consequence of the skirmishing line checking the pace, which generally happens when it becomes exposed to fire. The second line then comes up with the first, and they both subsequently become merged in the skirmishing line.

"Company and battalion commanders prefer as a rule to advance under fire with their companies deployed in line. When the ground is broken and there is a hot fire from the enemy, the captains lose control of their companies, and the battalion commander, having all his companies engaged, can only follow one of them, and so loses in the majority of cases the power of directing the operations of his battalion.

"Thus K——'s regiment advanced in lines of little depth, with the companies deployed. The enemy was only sighted beyond

* 1903.

the second spur. The rifle fire began and grew hotter every moment.

"Our battalions were ordered to halt and, as a consequence of the formation adopted for the attack, found themselves immediately exposed to the fire of an almost invisible enemy. The latter observed that our troops had halted and, attributing the fact to a momentary hesitation, took the offensive, sending forward against us a thick line of skirmishers supported by Bashi-Bazouks.

"The Turks were received with a heavy fusilade, so they lay down close to our positions and opened a hot fire. To properly carry out the task entrusted to K——'s regiment, the supports ought to have been kept out of action, and should have been kept out of sight of the enemy while the skirmishing line was set to work to dig trenches. If the enemy, who were few in number, were encouraged by our attitude to get too near, they could be repulsed by a charge made by a portion of our troops, who would immediately afterwards return to their positions."

This is the sharp, local counter-attack, on completion of which the troops regain their original position, as laid down in our infantry regulations. We see from the above extract how Kuropatkin insists on the necessity of deep formations; instead of two battalions deployed in the first line, he would rather have had one company deployed, several others in the second line, and a strong reserve. When we are urged to adopt extended and premature deployments, we cannot take too much to heart Kuropatkin's lesson which was the outcome of actual experience in war. His perfectly sound criticism applies equally to the advance of the British battalions in the Transvaal, and when certain innovators wish us to take the latter as a model, they are only putting us back in our progress.

To resume: Skobelev's object was attained, the second spur was held, and a step forward had been gained; we will now return to his report.

"At 2 A.M. I received information that the attack on Plevna had been postponed for a day. For this reason I withdrew the troops on my right slightly to the rear, and occupied another favourable position on the first spur, between the Plevna road and the Tuchenitsa ravine, where I could check any possible offensive movement on the part of the enemy. I immediately fortified this position, in spite of the fatigued condition of the troops. When it was placed in a state of defence, it comprised *two lines* of deep trenches with an excellent field of fire in front."

It is easy to see the importance which the General attached to the firm occupation of any ground by means of temporary field works; and yet no one could be more fearless and audacious than he was. The lessons of previous events, however, had borne fruit in a mind which pondered over and reflected on them. He did not conclude, as we have seen above, that *the front was inviolable*, because attacks against it had been repulsed; he merely recognised that, to force the front, suitable methods must be employed. These he thought over and worked out.

Let us see now what happened on the first spur.

"The 8th Regiment, by itself, formed the first line.

"At 5 A.M., August 28th (September 9th) a considerable force of the enemy approached our centre, which was held by two battalions of the 8th Regiment, between the village of Brestovitse and the position to the east of the road.

"The enemy's columns were received with rifle fire and with fire from Nos. 1, 2, and 3 Batteries of the 2nd Brigade as well as from the long range batteries. They halted and deployed into skirmishing lines, and opened fire in their turn.

"The 5th Battery of the 2nd Brigade, which had advanced to short range, lost in a few minutes a large number of its gunners and horses and was obliged to limber up and retire. Notwithstanding this, the fire of the other batteries and of the 8th Regiment forced the Turks to retire about 6 30 A.M.

"At 8 A.M. the Turks renewed the attack, this time against our right wing. The rifle company and another company of the 8th Regiment received the attack from behind the cover they had constructed with a heavy fire at short range.

"The Turks halted and lay down among the vines, and covered us with a hail of bullets. They continually tried to overwhelm us with fresh troops, and advanced to within 60 yards, but all their attacks were repulsed.

"Their last attack was the most serious, and I had to call up a part of the reserves.

"The 1st and 2nd companies of the 10th Rifle Battalion deployed on the right of the 8th Regiment, and advanced against the left wing of the Turks, which they rapidly drove back into the Green Mountains.

"There was some difficulty in halting the 1st Rifle Company which allowed itself to be carried away in pursuit of the enemy" (Skobelev's Report).

The events on the first spur correspond to the last lines of Article 129, "Duties of the Army in the Field," which defines the rôle of the infantry in the preparatory combat; "to contain any local attacks which the enemy may attempt, including those which have the appearance of a decisive effort." The rôle is a defensive one and its action is to waste the two adversaries; on the Russian side, for instance, the troops expended were two battalions of the 8th Regiment and a part of the 10th Battalion of Rifles.

This is not all; the infantry in the preparatory combat must at all cost contain the enemy, even if he makes "a decisive effort." Skobelev took the necessary measures for this in the dispositions which he adopted.

"In the eventuality of fresh attacks made in considerable force, I made the following dispositions:—

"The 8th Regiment continued to hold the position it was occupying. Its right was reinforced by the 9th Rifle Battalion, and the local reserve by three companies of the 2nd Battalion of the 6th Regiment.

"Two companies of the same battalion were on the extreme right near the Tuchenitsa, to prevent the enemy approaching by that ravine.

"In the centre, in front of Brestovitse, the 1st, 2nd, and 3rd Batteries of the 2nd Artillery Brigade and the long range battery were in position facing the village. On the left wing was the 9th Rifle Battalion, in shelter trenches, with two battalions of the 6th Regiment in rear.

"I kept the following troops in reserve under my orders :—The 5th and 7th Regiment and the 12th Rifle Battalion, all the batteries of the 4th Brigade, and the 3rd Battery of the 3rd Brigade under the command of your Highness" (Skobelev's Report).

These dispositions are interesting; they show the troops distributed in *depth*, the protection of the *flanks* by special troops, and the *combination* of the arms (infantry and artillery).

But it was not sufficient merely to hold on to the ground; progress must be made, and positions must be gained from which the decisive attack could be let loose; these were the second and third spurs.

On the 10th, therefore, the second spur was again attacked.

"On August 29th (September 10th) the 8th Regiment, supported by the 9th Rifle Battalion, advanced at break of day to occupy the second spur. The height was carried after a short opposition from rifle fire, and I *immediately had it fortified*.

"I decided not to attack the third spur the same day, because I did not think it advisable to bring up all my troops and waste them in a fight on unequal terms, before the general attack on Plevna began.

"One serious cause in retarding the attack has been the urgent necessity of strengthening the positions occupied by field works. This could not be other than a difficult task, owing to the regrettable insufficiency of entrenching tools at the immediate disposal of the troops. The men have had to excavate the ground with the lids of their mess tins, and with their hands. And they have had no tools to help them in rooting up the vines and so clearing a field of fire' (Skobelev's Report).

The report insists at some length on the necessity of the infantry being provided with entrenching tools; and, as we have pointed out before, the writer certainly had not a predilection for the defensive.

Directly the second spur was occupied, new and careful arrangements had to be made to meet an attack.

"When the 8th Regiment and 10th Battalion had occupied the second spur, I placed in rear of them the 1st and 2nd Batteries of the 2nd Brigade, and I brought up the 61st Regiment to the position, with the 62nd Regiment in *reserve*.

"The troops were disposed as follows :—

"The 1st battalion of the 8th Regiment was in trenches on the right of the batteries, and the 2nd battalion and the rifle companies of the same regiment were in trenches on the left, at right

angles to the front of the batteries and facing Krishin. Four companies of the 3rd battalion occupied the *second line* of shelter trenches. The 1st battalion of the 61st Regiment was on the left of the 2nd battalion of the 8th Regiment in trenches facing Krishin, with three companies entrenched in the *second line*.

"The 2nd and 3rd battalions of the 61st Regiment formed the local reserve, and were posted in a fold of the ground in rear of the centre of the line.

"The 2nd and 3rd rifle companies of the same regiment protected the position of the batteries during the night.

"The 10th Rifle Battalion occupied a special position on the right flank, in rear of the road near the Tuchenitsa ravine. It had two companies in the first line and two in the second, and was also protected by shelter trenches.

"The 62nd Regiment formed the general reserve on the east of the road from Lovcha to Plevna. It was placed in rear of the first spur which was covered with vines." (Skobelev's Report).

Every principle was observed; the ground was strongly held by several lines of trenches, that is to say in depth; the troops also were disposed in depth with their flanks secured; the infantry and artillery were in touch. These precautions were not superfluous.

"The Turks tried twice during the night to force our line of entrenchments; once in front and the second time on our left flank, on the Krishin side; but these attempts, which had not much heart in them, were easily repulsed by fire from the trenches held by the 8th Regiment, and we had no losses" (Skobelev's Report).

On the evening of the 10th the General received the orders directing the *general attack* to take place at 3 P.M. the following day. It was again necessary to gain ground, and the third spur was consequently attacked on the following morning.

"Early on the morning of August 30th (September 11th) I made a reconnaissance of our position to the east of the Tuchenitsa ravine, and chose there a favourable artillery site from which the northern slopes of the Green Mountains could be shelled, and the Turks prevented from approaching the heights from the direction of Plevna. At 7 A.M. I ordered the 3rd Battery of the 2nd Brigade, half the 2nd Battery of the same brigade, and the long range battery, escorted by two companies of the 62nd Regiment, to cross the Tuchenitsa ravine and occupy the position I had chosen. The fire of these guns aided the attack that morning on the third spur of the Green Mountains. The 61st Regiment was told off to carry the heights.

"At 10 A.M. this regiment moved forward to the attack. It was formed in two lines of company columns, with the 10th Rifle Battalion on its right flank, three companies of the 8th Regiment on its left, and three batteries in reserve. The officer commanding the regiment was ordered, directly he gained the spur, to *halt and fortify himself* and then await the hour appointed for the general attack.

"The first line was received with a very sharp fire from portions of the enemy who were well covered by their breastworks. It scarcely fired a shot in return and reached the spur in good order, where it took what cover it could, making use of the high crops of maize, and throwing up the soft ground. Having firmly established itself, it then opened fire. The enemy, when they saw our line halted, assumed the offensive by pushing forward heavy masses, especially against our flanks, and began to press our first line vigorously. A fierce rifle fire ensued which lasted from 11 A.M. till 2 P.M. It was impossible to continue the fight till the hour appointed for the decisive attack unless the first line was protected by shelter trenches and a place well under cover chosen for the reserves. In the meanwhile, the whole of the supports of the first line (the 3rd battalion of the 61st Regiment) had been pushed forward into the firing line.

"Seeing the losses sustained by the 61st Regiment and the 10th Rifle Battalion, and the ever-increasing masses of the enemy, I was forced to bring up the 62nd Regiment from the reserve, and to distribute it by battalions in rear of the 61st Regiment. Towards 2 P.M. the dense lines of Turkish skirmishers had got so close, that not only our first line suffered heavily, but also the reserves which were about a verst in rear. It was impossible to continue the situation any longer and, as it was very nearly the hour for the general attack, I ordered the 62nd Regiment to attack the enemy and dislodge him from the Green Mountain (third spur). The men of the 62nd eagerly sprang up and under a hail of shell and bullets made a vigorous onset against the enemy without cheering. The latter did not await the attack, but abandoned the Green Mountain and retired in disorder into their redoubts, whence they began to riddle us with their fire" (Skobeleff's Report).

Article 129 of our "Duties of the Army in the Field" furnishes a sober and accurate description of the preparatory combat, which Skobeleff, from actual events, has pictured so vividly:—

"The preparatory combat may last several hours; in battles on a large scale it will sometimes last throughout several days; it will demand ever-increasing vigour and concentrated effort.

"The infantry begins its action by advancing step by step, from position to position, towards the objectives which have been assigned to it. It is aided by the artillery which prepares each of its local attacks.

"The task of the infantry is rude and laborious. It consists in wearing out the enemy by heavy and continuous losses, in constantly menacing him and so forcing him to engage his reserves, in immobilising him by local attacks, and in containing any attacks which he may attempt, including those which have the appearance of a decisive effort."

The preparatory combat as carried out by the Russians under Skobeleff is a typical example. The successive positions were Brestovitse, the first, second, and, finally, the third spur. After the capture of each one of these positions, the enemy was obliged to

engage part of his reserves, he suffered loss while on the defensive, and he suffered still further loss in his efforts to assume the offensive; he was worn out. On the other hand, he found himself incapable of inflicting damage on the adversary in the positions which he had lost and the latter had fortified; he was constantly menaced by an assault from close quarters; in short, he was immobilised.

It is evident that if the Russians in the southern section had acted in a similar manner to Skobelev's force, they would have held the Turks in their redoubts, even if they failed to capture them. The Turks in this section would not have been able, in that case, to have reinforced the south-western section where matters were going so badly for them. The menace must be everywhere, the wearing out process must be carried out along the whole front; this is the reason why this phase of the action has been at different times termed the wearing out combat and the frontal combat. But the enemy can only be immobilised by action, and this characteristic is not at all expressed by the faulty term formerly in use, *viz. the demonstrative combat*.

If the task of the infantry is severe and laborious how can the artillery assist it?

A sufficient number of batteries are told off to the sole task of keeping the enemy's artillery in check (these are counter-batteries which can be under cover behind a crest); other batteries, which should be as numerous as possible, take up a position openly in front of the crest, so that they can see the whole ground over which the infantry combat will extend, and they will devote themselves to it exclusively. These batteries will not employ a slow and continuous fire, like the British batteries in South Africa, for example: for a fire of this description, when the defender burrows behind his cover, means a useless waste of ammunition which will be regretted afterwards. The batteries will make their action felt by series of storms of shell which will be delivered whenever there is an opportune moment; and, notwithstanding the use of smokeless powder, the opportune moment is recognisable by the gunner by unmistakable signs.

We have only to turn back to the Russian accounts to describe them:—

1. The artillery should support the infantry during its advance to its last position under cover, and during its advance from that position. When the infantry suffers heavily from the enemy's fire, the firing line halts and opens fire. At this sign, the artilleryman ought to strike and strike heavily, as the infantry has need of his support.
2. The artillery should protect the infantry while the latter is digging cover, and fortifying rallying points. At this stage, if the enemy's fire increases, the weakhearted stop digging, and the hardier spirits seize their rifles and open fire. The gunner should then pour in his broadsides and force the defender once more behind cover.

3. The artillery should support all offensive movements of the infantry. The firing line may have been firmly established and firing for some time, either from behind cover or in the open, but it is incapable of more vigorous action until it receives an impulse forward from the rear. (See later the "Decisive Attack.") When the supports rush forward to the firing line, the offensive movement will begin. This is the time for opening the most rapid fire possible. It forces the enemy to take cover, and facilitates the rush of the supports and their forward impetus.
4. The artillery should check all offensive actions on the part of the enemy. These are evidenced by the advance of the supports towards the firing line; "when the enemy shows his reserves," as Skobelev wrote in his instructions on the eve of the battle of Lovcha. This manœuvre can generally be observed, because the trenches of the firing line are as a rule on the forward slope of the crest, that is on the military crest. This is frequently commanded by the assailant's artillery, as, for example, in the actual instance with which we have been dealing. When this sign is observed, storms of shell should "nail" the enemy to the ground, his position having been carefully ranged on beforehand.

Extreme rapidity of fire and opportuneness are the governing features of the artillery during this phase. We have at the present time a very highly developed rate of fire, and this, with well trained artillery, compensates for the increased power of the rifle. To enable its fire to be opportune, the artillery should jealously watch all the incidents of the infantry combat; it ought, as it were, to feel its pulse. Between the two arms there should be more than a material bond; the same spirit and the same thought should animate them both; and it is the duty of every one of us in peace time to foster this relationship.

Was there any sign of it in the war in South Africa? And is it then astonishing if the infantry were unable to advance? The fire of the defence must be answered by a superiority of fire on the part of the attack, and then the infantry will be able to push forward to-day as formerly. Improvements in modern armament benefit him most who knows best how to get the full value out of them. They benefit the attack as well as the defence, in fact they benefit it more, for the attack is at liberty to use surprise, can accumulate all its powerful resources, and can employ this crushing superiority of fire against whatever point it chooses.

Let us see what the result is of the long preparatory combat which should actively progress along the whole front:—

- (1) The infantry, on one side at least, gains ground and closely invests the enemy's infantry.

- (2) The two infantries wear one another out, and, other things being equal, that side will be worn out the quicker whose artillery is mastered and becomes consequently ineffective.
- (3) The various events in the fight show the commander where he should deliver his blow in force. In the case we have been considering, the blow should have been delivered against the south-western section of Plevna; this was possible either on the evening of the 11th or on the morning of the 12th.

B.—THE DECISIVE ATTACK.

There arrives a time when both the adversaries feel the effects of the moral and material waste; neither of them is capable of a vigorous effort and there succeeds a lull of longer or shorter duration. Do we fully realise the moral effect which will then be produced, if one side or the other suddenly lets loose a powerful reserve of fresh troops, and vigorously supports it by an unexpected storm of lead and steel from numerous batteries which are unmasked at the same moment, especially if, in this suddenly disclosed mass, the determination to come to close quarters is shown by its depth and by its fixed bayonets.*

Nothing of this kind can take place at manœuvres where every decisive attack will always be considered a folly: a magnificent folly of Skobelev's, which in actual war led to victory. Do not let us be influenced by spectacular autumn manœuvres, where moral depression is not a factor. Let us regard only actions in war and actions which have been vigorously conducted. We shall then pin our faith to the power of the offensive and to the power of determination.

1. Article 130 of the "*Duties of the Army in the Field.*"

The short summary which we have given of Skobelev's attack on the fourth spur, showed us what essential conditions must be complied with in organising a decisive attack. The decisive attack is a *mass* disposed in *depth*, well guarded on the *flanks*, and with the way opened for it by the *fiercest possible artillery fire*: the various groups of the artillery must have had assigned to them their different tasks, which must be distinct and easy to carry out. In rear, in case of repulse, those positions which have been gained during the preparatory combat, must be *solidly held* by special garrisons.

The decisive attack must be let loose *unexpectedly*, and the advance must be carried out by successive *impulses* given to the troops in front by the troops in rear till the goal is reached.

* Skobelev added the effect of the regimental bands to that of the bayonets, which the Russians always carried fixed. A sceptic would laugh at them at manœuvres; but Skobelev was right, for he knew how to work on men's feelings.

Finally, and above all, the commander must be filled with the strongest determination, and he should devote to the decisive attack every available man if necessary. These rules, which are deduced from actual incidents in war, are identically reproduced in the "Duties of the Army in the Field," Article 130.

"The *mass* which is to deliver this decisive attack should have its ardour kept undiminished until the moment arrives for it to assail the enemy. It should also act by *surprise*.

"A *deep formation*, which is necessary everywhere along the front, is still more essential here. By means of it there is an incessant impulse from front to rear; for it enables bodies of troops to be continually pushed forward into the firing line, not merely to reinforce it, but to ceaselessly maintain and strengthen its irresistible ardour for the assault.

"All should be animated with a single thought: to follow the body of troops immediately in front and to *push* them forward if need be. A continually increasing fire will be maintained.

"But fire alone is not sufficient; the attack must be pushed home and the assault must be made by launching the *whole* mass against the enemy's positions."

2. A Discussion.

There are several points which ought to command our special attention because they have quite recently formed the subjects of lively discussions. There may be only a question of words at the bottom of the matter, but, as the controversy may influence some of our officers, it will be well to deal with it fully.

(a) *Successive Impulses*.—The possibility of the troops in rear pushing forward the troops in front has been denied, and those who lay down this method as a necessity and try to instruct troops in it, are termed arm-chair tacticians.

We will refer to the actual experiences of war, and will turn first of all to General Skobelev's report on his decisive action on September 11th:—

"The 61st and 62nd Regiments, supported on their right by the 9th and 10th Rifle Battalions, rose to their feet and moved forward with bands and drums playing.

"They had first to descend the wooded and vine-covered slopes of the third spur, and then cross the valley through which ran a stream with precipitous sides; they had to cross this stream and mount a steep bare slope about 700 yards long, at the summit of which were the redoubts. The Turkish entrenchments consisted of two powerful redoubts furnished with traverses and connected with each other by deep trenches; in front of them were rifle pits on the slopes of the plateau. The attacking troops were received by an indescribable artillery and infantry fire from the rifle pits and from the two redoubts, and also from the Krishin redoubt. In addition to this, the IV Corps had failed in their attack on those redoubts which had been their objective, and we were received with

enfilade fire from this side, which, with that from Krishin, caused us to lose heavily.

"When the first line reached the stream, it stopped, and a strong skirmishing line only was able to push forward and reach the bare slopes in front. Here it lay down and opened a comparatively innocuous fire against the enemy who were perfectly under cover and concealed. The enemy's fire in return caused it considerable loss. I ordered the 7th Regiment to support the attack and my last reserve, the 6th Regiment and the 11th and 12th Rifle Battalions, to move forward and take its place.

"The 7th Regiment advanced to the attack as if it were at manoeuvres; it reached the stream, crossed it, and commenced to ascend the slopes on the other side, *carrying with it portions* of the 61st and 62nd Regiments."

An eye-witness is quite as explicit :

"He (General Skobelev) had in line four infantry regiments and four battalions of rifles. He ordered a heavy fire to be opened, and, under cover of it advanced two regiments to the foot of the hill below the redoubts, and two of the rifle battalions to within 1,200 yards of them. He took up a position himself where he could best supervise operations, and, having ordered the fire to cease, commenced the attack.

"The assaulting troops had received the order not to fire and they advanced with their rifles at the slope, with bands playing and colours flying, and disappeared into the dense fog of smoke.

"Skobelev is the only general who gets close enough to the fighting to feel its pulse. The assaulting troops were barely visible and showed up in the fog as a confused mass. But the General, who felt all the pulsations of the battle, saw the line waver and begin to hesitate. Instantly he pushed a fresh regiment into the battle line, and awaited the result. *The impulse of these fresh troops carried the mass a little further forward*; but the redoubt blazed with fire and flame, and poured a torrent of bullets against the line, which again *stopped*. In the middle of this shower of lead Skobelev remained unhurt. Every one of his escort were killed or wounded, even his small Kirghiz who had a bullet in his shoulder. Again he saw the line waver, and hurled against the slope his fourth and last regiment, the 6th. *This fresh impulse drove the line almost to the escarp*; but the hail of bullets continued, the men fell by hundreds and the result was still uncertain. The line commenced to give. There was not a moment to lose if the redoubt had to be taken. Skobelev had only two battalions of rifles left, the best troops in his detachment. He rode to the head of these battalions and led them to the assault. Collecting the stragglers on his way, he came up to the wavering and hesitating mass and imbued it with his energy and courage. He led it with him and carried it forward amid cheers." (The *Daily News* Correspondent).

Can there be any doubt, after reading this, that an impulse from the rear is possible? Those who wish us to believe to the contrary

argue that the fire which checks the first line will also check the second. They forget that the conditions are not the same for the latter; the first line has only had artillery fire to cover it during its advance. If this is not sufficient, the firing line suffers loss and cannot progress; but once it is checked it adds its own rifle fire at short range to the effects produced by the artillery. The two fires together are, perhaps, not very effective against well-sheltered troops, but, as has been noted, both in Turkey and in the Transvaal, they compel the enemy to hide himself behind his cover and to let off his rifle without taking aim; that means, that his fire ceases to be dangerous.*

As a consequence, the wave in the rear, which by this time is not exposed to effective fire, can come up to the firing line and propel it forward till the defenders are reassured from their alarm, and they begin an aimed fire again. In this way the 7th Regiment could, to quote Skobelev's report, "advance to the attack as if it were at manœuvres." War itself is, in this case, a very convincing proof. Thus, by successive waves and their impulse, and by each wave gaining a little ground more or less, the attacks succeeds if it has the necessary depth.

In the instance we have been considering, the first wave, which was probably in two or three *échelons* according to the normal formation of the Russian infantry, advanced from the third spur to the ravine at the bottom of it, and gained about 870 yards. The second wave propelled the line about 220 yards further; the third wave carried it to the edge of the ditch, gaining about 110 yards; the last, the moral wave, the appeal and the example of the commander, gave the last impulse, the final rush of a few yards only.

Such is the experience of war, at least of the war of 1877-78, and the instance taken is one of a direct assault against an enemy strongly entrenched and armed with breech-loading rifles. The enemy had an abundant supply of ammunition, and did not spare it; they were moreover brave and were willing to stand up to a bayonet attack.

As far as this phase of the battle is concerned, our "Duties of the Army in the Field" is in thorough accord with the experiences of war, and ought to inspire us with confidence. Our duty is to comprehend its principles and to apply them to the instruction of our troops on the lines indicated to us.

(b) *The distance between the various bodies or échelons of the attack.*—At the third battle of Plevna, a regular decisive attack was delivered in the southern section, which did not succeed but ended in disaster. There was depth, and it was not owing to the flank being unprotected, as at the previous battle in this section, for there was no counter-attack made; the attack was quite as well,

* "The fire of the enemy continued without cessation, but it was hardly effective. Many of the Turkish soldiers rested their rifles on the parapet, but kept their heads below it; that is to say, they fired without aiming."—Captain Kuroptkin's notes after the battle of Lovcha.

if not better, supported than that in the south-western section, for its batteries were far more numerous. What was the reason then of the failure? We have already explained it. The successive waves were too far distant from one another, each starting an hour or an hour and a half after the one in front of it. They did not move off till the wave in front had been stopped for some time by a heavy fire at short range, till it had expended its ammunition and worn out its moral and physical force, and had thus become a negligible quantity as far as the enemy was concerned.

Naturally, the second wave in its advance encountered the same material conditions as the one in front of it, and, added to them, the discouragement produced by the shaken condition, if not the actual flight, of its predecessor. The result is that it breaks down fatally at the same point as the first wave. We can conceive the terrible condition of the retreat of these masses of Russian troops, falling back without protection across the bare slopes over which they had previously advanced with such difficulty.

An hour or an hour and a half's interval corresponds on uneven ground to a distance of not far short of a mile. This distance is too great, and should be rejected as such unconditionally. Let us see what the distance was in the south-western section between the battalions as they were successively sent forward.

From the third spur to the bottom of the ravine where the firing line was formed by the battalions of the first line, there was a distance of about 870 yards, and from there to the redoubts the distance was 440 yards, *i.e.*, there were 1,300 yards between the third spur and the redoubts.

The battalions of the second line (7th Regiment) started when the two preceding battalions had gone 870 yards. As the latter were probably formed in two lines at least, there was a maximum distance of 440 yards between the battalions of the 7th Regiment and the various lines of company columns which followed each other. When the battalions of the third line cleared the crest of the third spur, the firing line was 220 yards beyond the ravine; that is about 1,100 yards in front of the third line. This gives 550 yards between one body of troops and another. Consequently, if we suppose that battalions one behind another are each in two *échelons*, we shall fulfil the conditions of Skobelev's attack, if these *échelons* are from 440 to 550 yards apart. Is as great a distance as this always necessary? I do not think so; but the following considerations will serve us as a guide, though the figures are only arbitrary.

1. The fire directed at one body should not be able to do serious damage to the body in rear. This means that the minimum distance should be 220 yards.
2. We have seen above that the chief aid to the advance of the body immediately in rear of the firing line, is the sustained fire of that line. The maximum distance between the bodies would appear to be the longest time

that a rapid fire can be kept up for, that is four or five minutes. This corresponds, for an advance across country, to a maximum distance of 440 yards.

3. Finally there is the moral factor which must not be neglected and which again limits the distance. The leading lines must *feel themselves supported*. This is what Kuropatkin says with regard to this subject in his notes on the battle of Lovcha:

"There remained still about 1,500 yards to cross before reaching the enemy's trenches. A hail of lead covered the attacking troops, without checking their advance; behind them were marching comrades of their own regiment; on their right were some men belonging to a rifle battalion accompanied by a small body of men of a neighbouring regiment, the whole led by two officers; on the left was a company of skirmishers in line. Still further on the left thick masses of troops could be seen forming up for the attack. Whichever way he looked, every man in the attack could see numbers of his own men around him; and being sure that he would not be unsupported for long, his certainty of success increased every moment."

After such psychological facts as these, who can believe that attacks can be vigorously conducted by lines of skirmishers or swarms, if the men feel there is no support behind them.

It is *mass* which has the powerful moral force, as exhilarating in its effects on the component parts of it, as it is depressing for the adversary. This is what officers do not understand who base their tactical ideas on results obtained on the rifle range; and it is what cannot be reproduced at manœuvres.

In conclusion, it would seem advisable, from the data we have above, to keep a distance of from 220 to 440 yards between the different component parts of the attack. I do not attach, however, an important value to these figures.

(c) *The Formation*.—The formation for the battalions of the second line has been discussed at some length; here, again, actual experience ought to be our guide.

We have seen above, that Kuropatkin was opposed to the predilection which certain captains had for advancing with their companies deployed, because in this formation the men rapidly got out of control of their company commanders. Besides this inconvenience, it is quite certain that this formation is a very vulnerable one. To the artillery it is as easy to range on as a slow moving practice target. Moreover, the enemy's infantry when engaging the firing line distribute their fire, as a natural course, over its whole front, with the result that the ground in rear is almost uniformly swept by bullets. For this reason there is every necessity to march the troops in small bodies with intervals between them.

The English in the Transvaal advanced in their regulation manner, in several lines of companies deployed in single rank; as the 5th Regiment did at Plevna. But experience led several of the company commanders, who showed initiative, to abandon the formation, and they were justified in doing so. This is what an eye witness wrote on the subject:—"When men were under fire, officers found that a narrow, sinuous, and deep formation was easiest to handle. In emotional circumstances and in danger, each man, without looking for himself, follows the leader of his file, and the spirit of follow-my-leader, which is dormant in every soldier, awakes. This psycholological force should be recognised, and a narrow, sinuous, and deep formation can best profit by it. For it only requires a few resolute men at the head and a few energetic ones to supervise in rear, to move the whole column forward." *

Theory and experience are here in accord. It is very probable that the 7th Regiment, as well as the others, was in its customary formation of two lines of company columns when it advanced to give an impulse to the checked firing line; since, in the words of the official report, "it moved forward as if at manœuvres."

Under fire, a rational formation would be a line of company columns advancing by the flanks of subdivisions.† It must further be understood that the formation must be one which can rapidly be changed to suit circumstances, seeing that its object is to be strong enough to support and push forward the firing line.

(d) *A review of the dispositions for the attack.*—To sum up, a modern attack, which assures depth, is made in the following manner, or, rather, the following method answers to the conditions which existed in 1877 as regards the rifle fire of the Turks. And it is sanctioned by the experiences of war.

A *mass* is formed up behind the last cover, out of view of the enemy, and is launched, by surprise, if possible,‡ in successive waves of battalions. Each wave is in several échelons which follow each other at distances varying from 220 to 440 yards. The first wave deploys into a firing line as soon as it is compelled to open fire. The waves in rear follow in small columns or in groups, which are but little vulnerable, half-sections for example. The whole formation is vigorously supported by concentrated fire from a mass of batteries, and the fire is graduated to suit the exigencies of the infantry combat. Finally, the formation is strongly protected on its flanks by special bodies of troops detailed for the purpose.

This mass cannot be moved as a battalion in mass. It is evident that the firing line will be out of control of the officer commanding; the extent of its advance will vary with the amount

* In a French company at war strength the half-section appears to have sufficient N.C.O.'s and old soldiers to provide a resolute leader at its head and an energetic supervisor in rear, as well as a number of men brave enough to follow the former and assist the latter.

† "*Battalion in line of columns.*"—The companies are formed in company columns with their leading sections on the same alignment, or in line of sections in fours, with the leading fours in line." Article 217, Règlement sur les Manœuvres de l'Infanterie, 1904.—TR.

‡ Skobelev's attack could not act by surprise, but in spite of this it succeeded.

of the enemy's resistance. The wave which follows it has but one function to perform, namely, to propel the firing line forward when it halts. It can do this, for we have seen that it will have the benefit of the support of a double fire—that of the artillery which seizes the opportune moment, and that of the firing line which opens a rapid and violent fire directly it is checked.

The rest of the mass is a *reservoir of force* in the hands of the commander, who can employ it as he wishes, according to the requirements of the fight.

From it he can draw the successive waves with which to sustain the forward movement; he can take from it any troops required to defeat a counter attack, supposing the troops detailed for the flanks are insufficient and he can mask a *point d'appui* in the enemy's position, as Skobelev did the Krishin redoubts on September 11th. If the attack is shaken, he can assist by occupying or reinforcing the *points d'appui* in rear which have been fortified, and then organise a fresh attack (as Skobelev did on the second crest). When the attack has got possession of a part of the enemy's position, the reserve can enlarge the breach, as, for example, by the attack on No. 7 redoubt after the capture of No. 8. It will enable the commander to ward off offensive returns, and, finally, when the ground taken from the enemy has been solidly occupied, the remainder of the reserve will furnish him with troops to attack the next position of the enemy, if the defensive position is one of depth.

Let us see now how the attack is organised according to our regulations, and let us apply it to the ground of Plevna.

The attacking force is master of the third spur and has fortified it, and the whole of the troops forming the decisive attack are massed under cover of this spur, and, if necessary, of the second. Here they are under the hand of the commander-in-chief, who can let them loose when and how he pleases. We will see how this mass is distributed at the moment when, for example, the firing-line reaches the ravine between the third and fourth spurs.

Basing the conditions on those of the Russian attack, the battalions at the head of the mass will have advanced in two *échelons*, and, by successive rushes, will have reached the bottom of the ravine. The battalions of the second line, also in two *échelons*, have been ordered to march off so as to follow the first line at a distance of about 300 yards. At this time the leading battalions of the second line are advancing in small columns and have reached about the middle of the slope which runs down towards the ravine. The rear companies of these battalions are about 300 yards in rear, and have just cleared the crest of the third spur. The remainder of the mass is still under the hand and at the disposal of the commander-in-chief, and remains out of view and unexposed to fire. In short, this column of attack—if we give it this name though it is not appropriate—presents the following appearance to the enemy. At the bottom of the ravine there is a line of swarms firing, and, in rear, from 300 to 600 yards, there are two lines advancing in small columns.

Our critics reproach us by objecting that we are going back to compact formations and to the assaulting columns of Napoleon. In what way does the formation we advocate resemble the columns at Wagram or Waterloo? I remain of the opinion that the principles of war are at all times the same and will never change. These principles will always require a violent effort to be made, not against the whole front, but against a particular point.

It is tactics, or rather tactical methods, which change and adapt themselves to circumstances.

The study which we have just made, shows that our "Duties of the Army in the Field" comply entirely with the conditions of war, that is, of war with breech-loading rifles, which were already in use in 1877.

3. *What is meant by the decisive attack.*

There is yet another point to be cleared up. It may be said that there are attacks which are decisive and others which are not; that is to say, attacks which are not real.

This is not my opinion, nor is it that of our regulations. Every body of men which attacks, makes on its own account a real attack, and it devotes to it the whole of its efforts according to the principles laid down for the decisive attack. The section of infantry, confronted by a small group of trees held by the enemy, makes, as far as it is concerned, a decisive attack; the company, after the clump of trees, may find perhaps a farm, the capture of which is necessary; it, too, will make an attack with its utmost force. Every man in advancing should strive his utmost to make a gap in the enemy's line. If he cannot do this, and his force is spent, he must hang on to the ground where he is, determined not to lose what he has gained, and wait for an opportunity to make a fresh effort.

A body of troops may have to *observe* the enemy, like Leontieff's detachment in front of the Krishin redoubt; its *rôle* may be only eventually offensive. Or it may have to *contain* the enemy, a *rôle* which is purely a defensive one. But when it attacks, it must attack seriously. It is the duty of the commander of a force to mark the importance of the various attacks by the proportion of troops which he allots to them. This is according to the letter and the spirit of the note to article 129 in the "Duties of the Army in the Field."

"The commander-in-chief alone must decide to what extent each of the different portions of the front must commit themselves in the action. This he can do, either by largely reinforcing them by reserves, or by warning the commanders that they must rely on their own resources, or, finally, by definitely limiting their successive objectives beyond which they are not to go. But every body of troops engaged must go into action with the firm conviction that it will contribute more than all the others to the success of the battle."

To understand the matter more clearly, let us return to the third battle. Skobelev's advanced guard battalion was ordered to carry Brestovitse. This was a decisive attack for the battalion, to which it would have to devote every single man if necessary. Later on the 5th Regiment had to capture the second spur; it was a decisive attack for the regiment. The commander of the force, in ordering it, estimated, first of all, that a regiment was sufficient for the task; he thus regulated *the intensity of the fight* by the size of force he used, but he was ready, as we have seen in the narrative, to reinforce it, in case of its failure, with the troops which he had in hand.

On the morning of September 11th, when the third spur had to be captured, the 61st Regiment and the 10th Rifle Battalion executed a decisive attack for the benefit of Skobelev's detachment. Finally, at 3 o'clock, Skobelev's whole force executed a decisive attack for the benefit of the whole army. It was the Commander-in-Chief's task to have employed his general reserve, if he had kept one, in launching finally the real *decisive attack of the army*.

There is then no such thing as weak attacks and decisive attacks; every attack must be considered as decisive by those who have to carry it out.

However, there is only one attack which decides the battle, and I reserve the expression "decisive attack" for the attack which the officer in supreme command organizes from the general reserve and launches himself.

4. *The Depth of the Attack—The Brusque Attack.*

I have insisted above on the attack being disposed in depth, and have attempted to show how this depth is necessitated by having to guard against the unforeseen towards which the attack is moving. This is generally the condition of the attacking force, as it was of Skobelev's, for example, when he launched his force against the fourth spur. What was going on behind this spur? What would happen on the flanks? The unknown is everywhere, and to guard against the unknown there must be a large reservoir of force—that is to say *depth*.

Let us pass now to the side of the Turks. The Turks, as we have shown, often acted on the offensive, sometimes by counter-attacks, but more often and more successfully by offensive returns. In either case there was almost nothing more in the way of the unexpected for the defence to deal with. The attack advanced exposed to view, consequently there was less need for the counter offensive to be disposed in deep formations. In this kind of offensive the suddenness of the attack is of very great importance, but a volume of fire is above all things essential. We therefore arrive at a representation of the offensive in a somewhat different form to that with which we have been dealing. Surprise is the chief factor, for the time of action is extremely short; as many rifles as can be should be got into line to pour out the hottest fire

possible, and to spring at the throat of the enemy who should be engaged at close quarters. This means that the attack is reduced to the single phase of the assault. This we define as the *brusque attack*.

This kind of attack is suitable, as we have seen above, for the counter-attack and for the offensive return when on the defensive. But the offensive also may avail itself of it, especially in capturing advanced positions. As a general rule, the sudden attack is justified on all occasions when an overwhelming force can be employed against an enemy who has been thoroughly reconnoitred. It will in this case be less costly than a deliberately conducted attack, and it will have a greater moral effect. Troops employed in the preparatory combat will often use it advantageously when they are confronted by several *points d'appui* held by the enemy. Instead of disseminating their force, they will attack the *points d'appui* successively and will concentrate all their efforts, and especially the fire of their artillery, against one of them, while they merely contain the others. This use of the brusque attack is more justified nowadays with the increased power of the artillery and its ability to concentrate its fire.

The brusque attack is not sufficiently used in our manœuvres. People have not yet realised what the effect is of an overwhelming superiority of fire when it is produced by the sudden deployment of very superior forces. At manœuvres, it is true, there is no proof of this overwhelming superiority of fire, and the spectators at once exclaim against the unreality of the attack. For this reason I consider that manœuvres are the worst of schools for teaching the spirit of the offensive, and that they are for this purpose a most dangerous sham. They are very useful from other points of view, but, to benefit by them, one must be able to deduce the right lessons and not draw false conclusions.

Nowadays, when battles are characterised by a deliberateness which I consider to be excessive, it certainly does no harm to point out the possibility and the efficacy, in certain cases, of the brusque attack.

5. *Objections made against the decisive attack.*

A very distinguished officer, in two articles which he wrote anonymously in the "*Revue de Deux Mondes*,"* declared that he was opposed to *attacks termed decisive*; but I think that the criticism which he made was more one of words than of principles. We will examine the details of his indictment.

We will take his facts first. Decisive attacks, according to the author, have become impossible, and he gives as examples, the attack of the Prussian Guards on Saint Privat and that on the farm of Moscow by a part of the VII and VIII Corps, and subsequently by the II Corps. These repulses prove nothing, for the attacks, like several of the Russian ones, were made without any preparation beyond an artillery bombardment and without

* General de Négrier, under ***.—Tr.

a previous infantry engagement; that is to say without a *preparatory combat*, of which the Germans at that time knew nothing. Moreover, they were made against an adversary when neither his moral or material force had been seriously damaged, and the formations in which they were made were defective.

But the Prussian Guards were checked at about 600 yards from our line and by force of circumstances, and quite unconsciously, carried out a preparatory combat which opened the door to the real decisive attack, that of the XII Corps. What was the Crown Prince's operation at Sadowa, except a decisive attack against an enemy who had been wasted by the long preparatory combat so energetically carried out by the army of Prince Frederick Charles and by the 7th Prussian Division in particular?

Next the author quotes the defeats of the Russians at the first battle of Plevna where they lost 2,845 men out of 7,000, and at the second battle where they lost 7,335 men out of 35,000. But he forgets that these enormous losses were not sustained in the attacks, which, as a matter of fact, gained their first objectives, but were caused by the vigorous offensive returns which the Turks made, and occurred above all during the retreat. He forgets too, that if the attacks were not able to hold on to the positions they had captured, it was because they were wanting in depth, that is to say, mass.

The writer then goes on to Skobelev's attack, who, he affirms, used quite different methods. We have made a point, in the first part of this book, of enquiring into his methods, and they may be summed up as follows: a vigorous preparatory combat, supporting fire, and an attack well flanked and suitably disposed *in depth*. The writer puts it thus: "Here was an attack made in extremely difficult conditions, and it succeeded because it abandoned the methods of the attack in mass." I should like to know what the formation is, if not *mass*, when 17 battalions (of about 800 men each) are behind one another on a front of from 1,000 to 1,100 yards, or 13 men to a yard. I call Skobelev's attack an attack in mass. We see then that our difference of opinion depends on a single word. Evidently the writer meant by the word mass a column like that at Wagram, where the units followed each other at four paces distance; a column which formed a "block," and was intended to sweep everything before it.

Our mass to-day consists of waves at least 200 yards apart, and everything in this mass behind the firing line and the wave which is in immediate support of it, forms a *reservoir of force* which the commander can employ as he wishes, and in accordance with the exigencies of the fight. This, in truth, was Skobelev's mass.

The principle of an attack by a mass of men 10 to 15 deep has existed for centuries. But the mass of ancient times which, like the Macedonian phalanx, consisted of men crowded together, has opened out more and more widely as time went on, as was only natural.

We will now proceed to the way in which the attack progresses.

The writer of the article speaks of officers who have had no experience of war, and adds: "They contend that men or small bodies of men in rear can push forward the men or bodies of men in front. At what period have we seen this done?"

We have seen it in General Skobelev's attack, and that General's report is a proof of it. It was, moreover, on experiences of war that Dragomiroff based his opinion, when he instructed his troops "*in successive pushes from rear to front.*" (*The Training of Troops for War*, Part III, No. 36.)

Here again, I think, the discussion rests on the mere meaning of words. The writer of the articles probably understands by the word push, a physical push with the hands, which Ardant du Picq, as we shall see later, considered, long before 1870, to be out of the question and absurd. In fact, we find in the *Revue* the following lines: "The troops in rear bring with them a moral impulse, the only impulse which at this moment can produce a forward movement. They do not push on the stationary troops, but draw them on." If all that is required is to substitute the word *draw* for *push*, I am perfectly satisfied.

It is still necessary to understand what this "drawing on" means. It does not mean that it is general, and that the wave in rear will carry with it the whole of the firing line. This will not be the case; some men of the firing line will follow, others will prudently remain where they are, while some men will make off towards the rear (see Skobelev's Report). For instance, at the third battle of Plevna those men of the firing line who were not carried forward, did advance when they saw that the assault was successful. They came up in large numbers to the redoubt in which they formed a crowd which was more inopportune than profitable. Those who retired towards the rear were collected, thanks to the efforts of several officers and to the extraordinary activity of Captain Kuropatkin, and were brought on in some sort of formation. Some of these men were utilised to give the last impulse to the attack on the right, while others protected the flanks.

However, when a decisive attack is made at our autumn manœuvres, the whole of the men of the firing line, which is carried forward, follow the others, and no one is left behind; consequently, when there are two or three successive impulses, whether these are made by pushing or by drawing, there results an assault with from six to eight men deep. If, by way of instance, we were to reproduce at manœuvres Skobelev's attack, in which 14 battalions, or about 11,000 men, were pushed forward directly against the redoubts on a maximum front of about 1,100 yards, we should have, when the assault was made, 10 men per yard, or the men would be seven or eight deep. How the improbability and absurdity of an attack like this would be criticised! But we need not mind; in war, after we have deducted the killed and wounded, the faint-hearted who will not go forward, and the cowards who go back, the assaulting troops will be reduced to normal proportions. Therefore, at manœuvres, we must accept this apparent unreality.

of an assault in a dense body, or cease to train our troops to the decisive attack. For my part, I prefer to impress on everyone the leading idea of the attack, which our "Duties of the Army in the Field" defines so admirably. "Every man should be inspired with only one thought, to march on the body of troops in front of him, and even to push it forward." If it is wished, we can substitute the words "draw it forward." As for the unreality, once the reasons are known, it will be accepted.

The author of the articles does not tell us how he would employ his reserves to give what General de Négrier, when he commanded the 7th Army Corps, called the *great blow*, what Dragomiroff called the *blow with the fist*, or to produce what Napoleon called the "*événement*." But I think that if we replace the word "mass" by the expression "reservoir of force," and the word "push" by "drawing on," we shall arrive at a method of employing the reserves which will avoid a criticism which seems only to have taken words into account. It was against the idea of a *compact mass* giving *physical* propulsion that Ardant du Picq made a stand even before 1870.

"There are those who wish to explain that the effect of the columns is entirely due to their *material* action. But *physical* impulse is a mere idea; because, if the head is stopped, it will fall and get trodden under foot, rather than yield to pressure which would push it forward. Anyone who has seen, been through, and understood an infantry fight as conducted in our own days, comprehends this fact, which shows how erroneous is the idea of physical propulsion."

Ardant du Picq describes in the following lines the column whose object was to give the physical push he so rightly condemns:—

"Our battalion, I admit, marches in close column in good order; it maintains its sub-divisions accurately, with their distances of 4 paces." It is easy to understand how this kind of mass would be rejected by anyone who gave the matter serious thought.

But Ardant du Picq was far from denying the *moral* impulse that a column could give; and we find ourselves again on the ground we have gone over. "To sum up, there cannot be impact of infantry on infantry, and there is no such thing as physical impulse by means of mass. There is only *moral* impulse, and it cannot be denied that, the greater the number of men who give it, the greater will this moral impulse be in sustaining our own troops*, and the greater its effect on the enemy."

"Order is necessary in the attack because it shows *real resolution*. . . this is why we march in a given order, at full distance or at half distance; and it assists the officers in their duty, it engenders the feeling of union, each one openly advancing in the eyes of those around him."

So we see that thirty-five years ago Ardant du Picq wanted the moral effect produced by mass, and he expects it from columns at

* See extract from Kuropatkin's Notes, Part 2.

half or full distance marching steadily forward in rear of the firing line; he asks for strong reserves at the disposal of the chief commander, to give support, to meet attacks, and to complete by moral effect the destructive action of the firing line.

This is the spirit of war which remains for ever true, because it is based on the immutable psychological conditions of the human race which is subject to weariness and to fear. This is why Skobelev marched his troops to the attack with bayonets fixed, with unfurled standards and with bands playing. Modern armament has nothing to do with this moral effect. Lord Roberts, after the lessons of the war in which he was in chief command, understood this himself; he says, in speaking of the counter-attack: "in this counter charge, which should be practised at all manœuvres, the men will cheer, bugles will be sounded, and the pipes will be played."*

All this merely amounts to the exhibition of a firm resolution which has for its object the destruction of the enemy's moral.

6. *The choice of the objective for the decisive attack.*

The next point in order to be discussed is the following: what are the facts which lead the commander-in-chief to his choice of the objective for his decisive attack?

- (a) Some think that the point will be where the fight has broken the enemy's front and that "the decisive offensive will be limited to those areas where the general offensive has penetrated the front." This, in fact, was the case at the second and third battles of Plevna. At the second battle, the general offensive or preparatory combat indicated the point to be the central section, where an important rupture of the front had been effected by the capture of No. 1 and 2 Redoubts. At the third battle, the preparatory combat, or, to be more exact, Skobelev's attack, opened a breach which only required to be enlarged and deepened.
- (b) The preparatory combat will not always make a gap in the enemy's line, and we must be prepared for the case when the fight remains more or less stationary along the whole front. The point to strike, in that case, will be that which is most vulnerable, either a wing as at Saint Privat, or that part opposite which the attacker can most easily and by surprise collect the most powerful means of fire action, for example, a long line of artillery. The long crest at Sadowa which stretches from the Swipwald to Nedelisch by Maslowed is an example of this.

In the two preceding cases, the preparatory combat alone gives the commander the necessary data for his choice of the objective for the decisive attack.

* Combined Training.

- (c) Though I consider that the occasions are quite exceptional, there is sometimes a *key to the position* which a genius realises beforehand to be the adversary's vulnerable point, as at Austerlitz.
- (d) Also, circumstances of a special nature may authorise the choice of an objective beforehand. The occupation of Spion Kop, for example, certainly opened the way for the English to Ladysmith. Again at the battle of Colenso, Hlangwane Hill, which commanded the exits from the village, was also indicated as a first objective for the attack.
- (e) Finally, it is probable that in a battle where armies are engaged the zone of the decisive attack will often be decided more by the position of the army corps or armies in reserve than by the events of the fight. Very large reserves could not be moved rapidly from one part of the battlefield to another.

The terms of the "Duties of the Army in the Field" regarding the choice of the objective for the decisive attack are, therefore, perfectly justified. "The choice of this point is brought to him" (*i.e.*, the commander) "either by indications from the fight itself, or by circumstances which allow him to decide beforehand."

THIRD PART.

THE SOUTH AFRICAN WAR.

The South African War has three distinct periods.*

1. Before the arrival of Lord Roberts, the English applied the principles and methods which had been inculcated in them at their manœuvres in peace time and in their colonial wars. We shall find, in an aggravated condition, the faulty methods of the Russians at the beginning of the 1877 campaign. The lessons to be learnt are, so to speak, negative, for they chiefly show what ought not to be done.
2. After the arrival of the Field Marshal, different methods were adopted, and these were admirably suited to the quite special conditions. The success which they obtained induced certain people to see in the British methods the tactics of the future and tactics suited to the armaments of to-day. I will endeavour to show that the British tactics are in no way suitable to the conditions of European war.
3. After the departure of Lord Roberts there was merely a partisan war from which no general lessons can be drawn. I shall, therefore, not touch on it.

A. THE FIRST PERIOD.

I have no intention of writing history, but only on tactics. We will, therefore, examine one or two types of combats, which will enable us to comprehend the ideas inculcated in the English by their military education, and the fatal errors which were the consequences. These errors were quite independent of the power of modern armament, or rather they arose from the fact that the leaders of the British army had not reflected on the results produced by the properties of the arms of that day and the modifications these entailed in tactical methods.

* The narrative of operations is taken to a great extent from Captain Fournier's account in the "*Revue Militaire des Armées Étrangères*." Unless an authority is given, those paragraphs which appear in inverted commas are extracts from his work.

1. *The Battle of Colenso. (December 15th, 1899).*
Map No. 3.

On December 14th, the British force was bivouacked at Chieveley, about 6 miles south of Colenso. The force included:—

- 11,250 rifles of the infantry ($15\frac{1}{2}$ battalions).
- 1,325 rifles of the mounted infantry.
- 836 sabres (2 regiments of 3 squadrons).
- 44 guns.

The Boers, 4,000 to 5,000 in number, were posted on the hills on the left bank of the Tugela in the neighbourhood of Colenso, and held Hlangwane Hill on the right bank. The map and the accounts which have appeared of the South African War dispense with the necessity of describing the theatre of operations.

The dispositions of the British commander.—The idea of the general in command was that if he got possession of Fort Wylie at the northern exit of Colenso, the other heights would mask each other, and “that our artillery fire and the want of water would compel the enemy to evacuate them” (General Buller’s report). The initial objective, therefore, was Fort Wylie. In consequence, the following orders were issued, at 10 p.m. on December 14th, for the operations next day:—

“It is the intention of the General Officer Commanding to force the passage of the Tugela to-morrow.

“The 5th Brigade will move from its present camping ground at 4.30 a.m. and march towards Bridle Drift, immediately west of the junction of Doornkop Spruit and the Tugela. The brigade will cross at this point, and, after crossing, move along the left bank of the river towards the kopjes north of the iron bridge.

“The 2nd Brigade will move from its present camping ground at 4.30 a.m., and, passing south of the present camping ground of No. 1 and No. 2 divisional troops, will march in the direction of the iron bridge at Colenso. The brigade will cross at this point and gain possession of the kopjes north of the iron bridge.

“The 4th Brigade will advance at 4.30 a.m. to a point between Bridle Drift and the railway, so that it can support either the 5th or the 2nd Brigade.

“The 6th Brigade (less a half-battalion escort to baggage) will move at 4 a.m. east of the railway in the direction of Hlangwane Hill to a position where it can protect the right flank of the 2nd Brigade, and, if necessary, support it or the mounted troops referred to later as moving towards Hlangwane Hill.

“The Officer Commanding the Mounted Brigade will move at 4 a.m. with a force of 1,000 men and one battery of No. 1 Brigade Division, Royal Field Artillery, in the direction of Hlangwane Hill; he will cover the right flank of the general movement, and will endeavour to take up a position on Hlangwane Hill, whence he will enfilade the kopjes north of the iron bridge.

"The Officer Commanding the Mounted Brigade will also detail two forces of from 300 to 500 men to cover the right and left flanks respectively and protect the baggage.

"The 2nd Brigade Division, Royal Field Artillery, will move at 4.30 a.m., following the 4th Brigade, and will take up a position whence it can enfilade the kopjes north of the iron bridge. This brigade division will act on any orders it receives from Major-General Hart.*

"The six Naval guns now in position north of the 4th Brigade, will advance on the right of the 2nd Brigade Division, Royal Field Artillery.

No. 1 Brigade Division, Royal Field Artillery (less one battery detached with the Mounted Brigade), will move at 3.30 a.m. to the east of the railway, and proceed under cover of the 6th Brigade to a point from which it can prepare the crossing for the 2nd Brigade.

"The six Naval guns now encamped with No. 2 divisional troops will accompany and act with this brigade division."

December 13th and 14th had been spent in bombarding the enemy's position without any result. The object of this bombardment was to discover the enemy's position, but the Boers took care not to reply to it.

There was no exploring, no reconnaissance either by cavalry or infantry, and no patrols were sent out to protect the front. Nothing was known, and yet the plan of action was decided on.

The Battle.—"At 5.30 a.m. on December 15th, the Naval guns came into action to the west of the railway, about 3 miles south of Colenso, and opened fire against the left bank of the Tugela." The Boers did not reply.

The Left Attack.—At this moment the 5th Brigade was advancing in mass of quarter-column, the battalions in this formation being 12 paces behind one another. The whole brigade formed, therefore, a rectangle, the front of which was 55 yards and the depth 270. "The column advanced without an advanced guard and without any protection against surprise. The Boers allowed it to approach the bank of the river without giving away their position on the opposite bank. The first shell fired was from a gun in action on the south-west slope of Grobler's Kloof; it burst in front of the 5th Brigade, which immediately began to deploy. The shell was instantly followed by a violent rifle fire from the trenches at the bottom of the valley." It was under the demoralising effect produced by this sudden opening of fire and the consequent losses that the brigade completed its deployment. In the confusion which ensued, units were mixed up; the companies in front rushed forward, looking for shelter in the folds of the ground and even in the river bed; the companies in rear also dispersed to look for cover. It was during this short period that the leading battalions sustained most of their loss.

* Commanding 5th Brigade.

"In consequence of this surprise-attack by fire, the 5th Brigade was immobilised till 10.30 a.m., when it began its retreat." What can we conclude from this incident as to the difficulties or the impossibility of the attack? Only one conclusion is possible, and that is, that a march formation like this against an enemy is an inconceivable anachronism, which showed on the part of those in command of the British army, and those who were responsible for its instruction in peace time, an extraordinary want of study and judgment.

The centre attack.—In the centre, the 2nd Brigade's objective was Colenso. The brigade advanced along the west of the railway, with two battalions in the first line and two in reserve. The 6th Brigade marched on the east of the railway, in the same formation and almost in line with the 2nd Brigade.

"Towards 7 a.m. the Boers opened a heavy fire on the British centre from the heights to the north of the iron bridge as well as from the river bank itself. In spite of this, a portion of the West Surrey Regiment managed to gain a footing in Colenso by utilising the cover afforded by the bushes growing round it, and even succeeded in occupying the railway station. But as it was not supported by the reserves, it could neither advance towards the bridge nor maintain its position in the village, and it was consequently soon forced to retire.

"From 7 a.m. till 9.45 a.m. the British troops could make no advance, and remained in a position about 750 yards from the Tugela and 1,000 yards from the enemy's trenches. Both sides exchanged a hot fire, but the British troops received no impulse from the rear and were unable to make any progress.

"About this time an incident occurred which seriously influenced Buller's decision a little later to order a retirement. About 9.45 a.m., Colonel Long, who had been ordered to support the central attack with the 14th and 66th field batteries, moved, on his own initiative, 350 yards to the right, and came into action about 709 yards from the river. Directly he had done this, the batteries found themselves exposed to a heavy rifle fire from the enemy. Colonel Long himself was wounded, and the gunners, taken by surprise, left their guns and sought refuge in a ravine in rear."

Six companies were sent up to extricate the artillery, but could do nothing and were forced to take cover with the gunners in the ravine. After the fight, 10 guns and limbers and the ammunition wagons of two batteries fell into the hands of the Burghers.

The right attack.—Lord Dundonald's mounted infantry detachment in vain attempted the attack of Hlangwane Hill with 1,000 men and a field battery. His troops were unable to advance against the fire which opposed them, so they took cover and remained immobilised till they got the order to retire.

The order was given by General Buller at 10.30 a.m. The retirement was carried out without hindrance from the Boers who did not pursue.

2. Remarks on the Battle of Colenso.

We find on the English side, in this battle of Colenso, all the errors of the Russians at Plevna, but to a worse degree. The British army had not profited by the lessons of 1877, and its commander had either not studied the events of this campaign or had interpreted them wrongly.

(a) *Obtaining contact.*—There were no means used for obtaining contact with the enemy, nor were the usual protective measures employed against surprise. But here the offence was more serious than at Plevna, for the British had no information about the enemy's position, while the Russians knew almost exactly the situation of the entrenched camp which they were going to attack.

(b) *The Commander.*—Here again there was a preconceived objective, Fort Wylie. Notwithstanding this, the British commander divided up the whole of his force and did not keep as a reserve even the sixth or the twelfth of his infantry, as was done at Plevna. He had no reserve at all. In such cases, where does the rôle of the commander come in, for he has let go all his troops. Each brigade had its appointed task, and so had each brigade division of artillery. None of the latter, except the 2nd Brigade Division, were subordinate to any of the infantry commanders, and there was no mixed command organised. As he had kept no force in hand, the general commanding proceeded to issue orders to the troops in matters of detail. He sent an order for two battalions of the 4th Brigade to support the 5th Brigade which was so heavily engaged (this order was probably not complied with, for the 4th Brigade had no losses, as will be seen later), he gave direct orders to the artillery, and then went off to Long's batteries. He brought up to their assistance, first two companies and then four others, and so on. The general officer commanding made one single decision, and that was for the retreat, and in this decision he was actuated rather by an incident in the fight (Long's batteries) than by any sign of exhaustion in his troops, for they had not been greatly tried and a large proportion had not even been engaged.

We have discussed before, in the battles of Plevna, the rôle of the commander and the necessity for his retaining strong reserves. Our observations, then and now, enable us to understand the precepts contained in the "Duties of the Army in the Field" (note to Article 129), on the manner in which the commander of a force regulates the intensity of the battle in the different parts of the field.

It is impossible to explain his rôle better. He loses control over his troops once he has committed them to the fight, but he *controls* the conduct of the battle by his *general reserve*, which he personally uses and which he must use *as strong as possible*.

The British general had not the least idea of this; his was not an individual fault, for all the different generals, with a few

rare exceptions, acted in the same way. It was the result of a faulty military education. It was an error in *doctrine*.

(c) *The distribution of the force*.—The objective of “the main attack,” to use the words of the official report, was, to begin with, the Colenso bridge, and in the report General Buller states that he himself went to this part of the field “to direct the attack.” He should have had then in this quarter a “reservoir of force” which would have enabled him to make an effort proportionate to the resistance and to break it. But he had nothing of the kind. The whole of his force was evenly distributed over the front; and even the 4th Brigade, which served as a kind of reserve, was moved off further to the left. Consequently an initial success, the capture of the Colenso railway station by a portion of the 2nd Brigade, could not be made use of. On a smaller scale, it reproduced what happened at the second battle of Plevna after the capture of the two redoubts in the central section, and at the third battle after the capture of Mount Skobelev; there were no reserves to benefit by a success gained by the frontal attack.

(d) *The energy of the attack*.—As the *Revue militaire des armées étrangères* has already pointed out, there was no impulse given from front to rear; and the casualty returns show this to be the case.

In the 2nd Brigade there were three battalions in the first line and one in the second; and the following were their losses in killed and wounded:

1st battalion,	94	men or	12·5	per cent.
2nd	75	”	10	”
3rd	32	”	4·2	”

Total 201 men or, in other words, less than 7 per cent.

But the 4th battalion was not engaged at all, and lost only one man. It certainly, therefore, did not make an effort at pushing the others on.

In the 6th Brigade, two half-battalions were engaged in the first line and two battalions were in reserve.

The first half-battalion lost 32 men, 8·5 per cent., and the 2nd half-battalion 23 men, 6 per cent. The two rear battalions lost, the one 3 and the other 2 men. These battalions, therefore, made no attempt to give the others a push forward.

Finally, the 4th Brigade, which should have supported either the 5th or the 2nd Brigade, aided neither the one nor the other, as its small losses show. Its casualties were: 1st battalion, 8 men; the 2nd battalion, 2 men; the 3rd battalion, 1 man; and the 4th battalion, none.

We see, therefore, that the battalions in the second line and in the reserve were not engaged, and that there was no attempt on their part either to push or to draw the others forward. And it is from such facts as these, that people try to prove that attacks are no longer possible, and that troops in rear cannot give a forward impetus to troops in front. What actually occurred

amounts to this: there was a mere holding attack along the whole front in which only five battalions out of 12 were engaged, and the engagement consisted simply of fire at medium ranges. Nowhere was a serious effort made. There was no *determination to win*, such as cost the Russians losses amounting to about 30 per cent. of their effectives; for the English casualties amounted to only 7 per cent. of their total infantry.

The 5th Brigade alone was engaged in its entirety, and its losses were due chiefly to surprise, which the lack of precautionary measures was responsible for, and to its use of a faulty formation. The losses of the four battalions when they were surprised marching in close order, were in proportion to their respective nearness to the enemy. The 1st battalion lost 191 men; the 2nd, 129; the 3rd, 104; and the 4th, 51; or a total of 475 men.

If we suppose that the last battalion sustained the whole of its loss in the fight after the surprise, when all four battalions were exposed to the same conditions, we may calculate that in the surprise the three leading battalions approximately lost 140, 78 and 53 men respectively. That means to say, the loss of 271 men was due to an essentially vicious formation.

(e) *Artillery preparation.*—The British were as ignorant as the Russians at Plevna of combining the action of the artillery with the infantry. The prelude to the fight was a bombardment lasting for two days, and it was continued as a preparation to the infantry advance. Its object was to reconnoitre and wear out the enemy; but the Boers sedulously took no notice of this storm of shell which wasted an enormous amount of ammunition, and when it was over, the English were no better off than they were before. On the other hand, the enemy was warned and had had two days and three nights to fortify his position, and then astonishment was shown because the position was found to be formidable.

The British had certainly not studied the operations in front of Plevna, or, if they had, they had not drawn logical conclusions.

(f) *The preparatory combat.*—The British had no conception of the importance of a preparatory combat along the whole front with the object of immobilising the adversary, wearing him out, and showing the commander of the force the vulnerable point. Nor did they possess any knowledge of the decisive attack against an objective which the frontal attack has indicated. They adopted a simple uniform deployment, a battle on parallel fronts, and, when their troops were stopped by the enemy's fire, made no attempt to find the weak point in his armour. We shall see better, later on, their idea of the frontal attack, and that it continued to be a mere *demonstration*. It had nothing in it of the vigour, laboriousness, and offensive power which we attribute to it; characteristics which are exemplified so clearly in Skobelev's actions against Plevna, and are so definitely expressed in our "*Duties of the Army in the Field.*"

(g) *Combination between the different arms.*—There was no combination between the different arms. The cavalry received no

orders and did nothing; in the whole day's fighting the cavalry brigade (6 squadrons) lost two men altogether. Can we say, to explain this, that its reconnaissance was stopped by the enemy's fire and that it did its best to assist the other arms? Did it move out to either wing, finding it could make no way in front; did it try to do anything? The answer is, no!

As for the artillery, we have seen that it was under the direct orders of the general officer commanding; the brigade divisions, with one exception, though they had each a mission which allied them to certain infantry units, were none the less independent of the officers commanding these units. The artillery did not wait till the infantry had cleared the way for it, and two batteries were overwhelmed with rifle fire at short range in consequence; and the infantry, on their side, waited for orders from the general before they went to the help of the artillery. Lastly, the gunners had no information about the progress of the infantry action and fired at the most prominent targets, walls or trenches on the hills on the opposite bank, and neglected the low-lying trenches from which came the fire which checked the infantry advance. We see how alien this is to Skobelev's principle, "the order for the attack will be communicated to the officers commanding batteries" (1st Part, II, B. 3).

At Colenso each arm acted on its own account, or did nothing at all, like the cavalry. The results are easily foreseen, and they are in no way due to the properties of modern firearms. Where comradeship in the fight is wanting a lack of strength is the result. This comradeship can only be fostered by daily intercourse in peace. In England it exists neither between the different arms, nor between one battalion and another. Very often it does not exist even between officers of the same corps who do not always live in the same station, and they are strangers to one another unless they meet on duty. Good fellowship in the fight can only be produced by good fellowship in time of peace, and the latter results from a life in common.

The English have not learnt from Russian experiences in the matter, nor have they studied the Russian hero, General Dragomiroff, who so rightly sums up the whole teaching of tactics in this expression, "comradeship in the fight."

(h) *Breaking off the infantry fight.* In enumerating the casualties after the war, several writers described the effects of the fire to have been such that men were unable to raise their heads without being hit, that they were "nailed" to the ground, and that they were unable to leave their cover even to retire. There appears to be an obvious exaggeration in their accounts.

At Colenso, for example, leaving out the 5th Brigade, which was surprised, there were four battalions engaged in a fire combat at short range, which lasted approximately for $2\frac{1}{2}$ hours; in this and their subsequent retreat under fire the battalions lost 256 men all told, or $8\frac{1}{2}$ per cent. of their strength. One has then the right to conclude that troops can remain lying down under fire without

artificial cover and at short range, and then retire without becoming disorganised, even in a fight with such excellent shots as the Burghers.

All the chief actions in the South African war point to the conclusion that infantry who are hanging on to a position can get out of it again, even more easily than in former days. This is only common sense, for the greater the distance at which troops engage the easier it is to break off the fight.

When people used to fight with swords, the vanquished were lost if they turned their backs. For this reason the losses of the defeated side in olden days were out of all proportion to those of the victors. The proportion decreases as firearms improve, because the vanquished can more easily escape. This is a universal law, as Ardant du Picq showed. For this reason, and I think that everyone agrees with me, small supple detachments, which can manœuvre well and take the proper precautions against surprise, have a power of resistance and can reconnoitre to a far greater extent than formerly. This new faculty gave rise to the idea of employing covering detachments, first in the defensive and afterwards in the offensive.

Because of this power advanced guards must be used to find out something definite, for lack of which the fog of war would be continued indefinitely.

Every day there is less risk of the advanced guards not being able to disengage.

To sum up, the following were the mistakes of the English at Colenso :—

No reconnoitring troops.

No protecting troops (advanced guards, etc.).

A preconceived plan of battle.

An engagement along the whole front without any general reserves; in other words, abdication of command.

Wrong ideas on artillery preparation.

Inexact ideas on the preparatory combat.

No idea of the decisive attack against one point.

No determination to win.

The lessons from Colenso are consequently purely negative.

3. *The second attempt to relieve Ladysmith Map (No. 4).*

We will not keep the reader too long in the theatre of operations on the Natal side, for the conclusions to be drawn from Buller's four attempts to relieve Ladysmith are almost entirely of a negative character. The second attempt, however, will enable us to discuss two important points, one dealing with the attack and the other with the preparatory combat.

We will go over the facts briefly.

The fundamental idea of the second attempt was to try and turn the right of the Boer position. This was quite right, but prompt

execution was necessary. The order for the movement was dated January 8th, 1900, but the first troops only crossed the Tugela on the 17th, having covered less than 25 miles. In spite of this delay, if the British had acted promptly, they might have succeeded, for there was only a very small force in front of them.

In fact, it was only on the 19th that a Boer council of war decided to send Botha with 2,000 men to protect the right.

The first idea—a quite correct one—was to try to turn the enemy's right by the valley in which Acton Homes stands. Lord Dundonald, commanding the mounted troops, opened the way by a successful engagement beyond Acton Homes, and no obstacle to an advance appeared to exist, when a further delay occurred. The commander—the execution of the operation had been entrusted to General Sir Charles Warren—changed his plan for some unknown reason and decided to make a *direct* attack on the 20th against the enemy's right, that is to say, against Taba Myama above Venters Spruit.

During this delay the Republicans fortified the ground, cutting trenches even in the solid rock, and the consequence was that the British again found themselves in front of a strong position. A considerable share of the latter's want of success was due to the fact that they almost invariably allowed their enemy time to strongly fortify the ground they were going to hold. On the rare occasions when the Boers had not time to do this, the British were successful, as at Talana Hill for example.

(a) *The fight at Venters Spruit, or Taba Myama (January 20-23).*—The attack, which was made by four battalions, was well carried out. They advanced *by rushes*, they made *use of the ground*, they were *supported by infantry and artillery fire*, and the enemy's trenches on the edge of the plateau were occupied. But the attack then found itself in front, and within short range of a second line in the defence which was out of view and could not be shelled by the British artillery, nor even by their howitzer batteries. The infantry, who were thus left unsupported, were unable to push on. Artillery support could only be given by bringing the guns up in line with the infantry, and the Boers' fire would have rendered this impossible. The two opponents remained facing each other for 48 hours, after which the British retired without difficulty.

The attack failed for the following reasons:—

1. The defence was organised in depth. The position, which was well selected by the Boers, shows the advantage of occupying the rear slope of a hill which has a short field of fire for the infantry but is sheltered from artillery fire.
2. The attack, on the other hand, was not disposed in depth, and the commander of the force, having no reserves, was unable to reinforce it. The four battalions were reinforced on the 20th, on the initiative of a brigade commander, by the following weak detachments which were sent up one after another:—

At 1 o'clock by a battalion and some mounted infantry.

At 2.50 by a company.

Between 4 and 5 o'clock by a battalion which was split up into several detachments of one or two companies.

3. There was no determination to win, for on the 20th, General Clery, when he had got possession of the heights, intimated that he could not advance without making a frontal attack, and this he considered inexpedient. Sir Charles Warren replied that "a frontal attack with heavy losses would be playing into the hands of the Boers."

A determination to win was also lacking on the part of the general commanding, for during the 20th, 21st, and 22nd his entire efforts amounted to the engagement of 8 battalions out of the 19 at his disposal.

6. *The Battle of Spion Kop.*—The attack had failed against the enemy's right, so an attempt was made in the centre against Spion Kop.

During the night of January 24th–25th, two British battalions with a detachment of engineers, but without artillery, climbed the heights by a narrow path and fell on a weak detachment of the enemy which fled. The battalions occupied a position at the southern end of Spion Kop, where there was limited space, and strengthened it by means of trenches. On the following day they were attacked by a very small force of Boers, about 450 all told, and a fight ensued which lasted all day, with the British on the defensive. The two battalions were reinforced by two other battalions from the 4th Brigade, but were forced to retire, in spite of their enormous numerical superiority, after having sustained considerable loss.

4. *Observations on the Second Attempt.*

a. *The "Offensive Return" of the Boers.*—The affair of Spion Kop is worth going into. The British gave the following explanation of their reverse. After the capture of the first trenches, which were at the southern end of the kopje, a dense fog came on, which "did not allow the troops to push on further, and they had in consequence to occupy and hold on to a space which was too limited." This explanation is hardly an acceptable one, for the fog prolonged the night, and was an aid instead of a hindrance to the British. It concealed their advance and would have allowed them to have gone forward without opposition to a position where the plateau was widest. The following is what I think might have been done in the circumstances:—After the first trenches had been captured, a rallying-point should have been formed there with a garrison of, say, 4 companies. The remainder should have pushed forward, with the usual precautions against surprise necessitated by the fog. When a suitable position was reached, a second rallying-point, or rather a line of rallying points should have been formed, and should have been occupied by a garrison. The remainder would then

again have pushed forward. In this way it would have been possible to have brought up guns, or at least mountain guns and pompoms. But for this an accurate appreciation of the conditions of the fight and a correct idea of the value of depth were necessary.

Besides, was the position really so very narrow?

"At 11 a.m. General Coke visited the position: he found that the garrison was too large for the restricted space into which it had been forced, and he suspended the despatch of fresh reinforcements (2 battalions of the 2nd Division)." On the other hand, about 2.30 p.m. Lieutenant-Colonel Thorneycroft reported to Sir Charles Warren: "I have held out to the utmost with the troops which were up here when the fighting began. Some of the Middlesex have now arrived. I am told that the Dorsets are coming too; but the truth is, *we are not strong enough to hold such an extended line.*

Finally the 4th Brigade sent two battalions to Spion Kop; one of these came up on the height itself, the other turned east and, by a very difficult ascent, reached the summit at the eastern edge of the plateau. It was then 5 p.m. If there had been sufficient depth in the attack to begin with, a battalion could have occupied the eastern summit early in the morning.

The attack on Spion Kop failed because it had not the requisite depth for the task imposed on it; because it had no artillery, or entrenching tools, or water, or provisions, and was unable in consequence to resist an offensive return made in force. In a word, the attack lacked *organisation*.

We will now proceed to the Boers' offensive return. Their situation when the sun rose was almost desperate; with Spion Kop taken, the way to Ladysmith was open. Botha rapidly collected all the troops he could, about 450 altogether. With these 450 men, supported by 7 guns, he forced at least 3,000 entrenched British troops, who defended themselves well, to retire; and by a frontal attack. How can we explain the anomaly? It was due to *superiority of fire*; to the extraordinary shooting of the Boers who advanced by short rushes while maintaining an uninterrupted fire, and to the co-operation of their infantry and artillery, both of which directed the whole of their efforts against a common objective. This superiority of fire is shown by the enormous losses of the British. The 5th Division lost 43 officers and 527 men out of a calculated strength of about 1,800 men (2 battalions at 800 men each, some mounted infantry, and half a company of engineers). This gives a total of 570 killed and wounded—in other words, about 30 per cent. The 4th Brigade lost 17 officers and 152 men out of an effective which we may reckon to have been 1,600 men (2 battalions). Its loss, therefore, was 10 per cent. Out of the whole detachment there was a loss (not including the missing) of 739 men, or from 22 to 25 per cent., which proves the courageous nature of the British resistance. But superiority of fire alone would not have produced these results; what was most important was vigour and

a determination to win; that the Boers fulfilled these requirements is testified by their losses, which amounted to 44 per cent.

We have here an instance of a regular decisive attack against a front which succeeded; it was successful because it was made with rifle and with gun and at the *cost of men*; for 44 per cent. of the attack were left on the ground.

We cannot say, after this, that frontal attacks are impossible. But to succeed, the means must be adequate and the price must be paid. If, instead of 7 guns, the Boers had had 7 batteries, which have greater effect than six times the damage done by 7 guns, their infantry would not have suffered so and victory would have cost them less dear. Their insufficient means had to be remedied by increased efforts.

Consequently, instead of disheartening our infantry by all that is written about the impracticability of the offensive, it would be better to inscribe in letters of gold in every barrack room the following paragraph from our Infantry Drill Regulations (1884):—"A brave and energetically led infantry can advance under the hottest fire possible, even against trenches which are stoutly defended, and capture them."

This paragraph makes incredulous people smile; but the Boers at Spion Kop have shown its truth and their loss gives the measure of their valour.

We should imbue every officer's and every man's mind with the above idea; though it does not mean that the commander should not endeavour to collect for the attack all possible material means, and so husband the vital force, which is the man. The Boers' attack on Spion Kop is a lesson to be taught to everyone, and is one which deserves to be carefully thought out.

(b) *Persistence in the execution of the attack.*—The British commander had conceived a suitable plan of attack, which was to turn the enemy's right; but he did not persist in his intentions. Lord Dundonald's mounted corps, on the 19th, opened the way to Ladysmith by Acton Homes, and was three miles beyond that place. It appears that he only had to advance. But the commander abandoned his first idea and decided to attack the right of the position in front. Then, before employing all his available resources to decide the question here, he again changed his plan, and another attack was made, this time against Spion Kop. In each case the attack was made with insufficient means, and with but a small part of his force; that is to say, his *resolution* was very limited.

The incidents of the battles which we have related, lead us again to point out the results of employing-successive waves at too great a distance apart.

On the 20th, Taba Myama was attacked by four battalions. The first wave was stopped on the edge of the plateau, and several hours afterwards, when the wave in front was exhausted, other small waves, consisting each of a company or of a battalion, were pushed forward. Each of them met the same fate and in the same position as the one in front of it.

A similar action was reproduced at Spion Kop: first wave, two battalions on the night 24th-25th; second wave on the morning of the 25th, two battalions which were hardly engaged; third wave, at mid-day, two battalions of the 4th Brigade.

These successive efforts accomplish nothing, because they are not close together. They should be superimposed more nearly, so as to form a *single action* and not a series of small individual actions.

We see the same thing throughout the operations. The attack on Taba Myama was made with insufficient forces and it failed; four or five days later came the attack on Spion Kop, again with a weak force, and again failure.

The British Commander had not laid to heart the lesson of the central section at the second battle of Plevna, and he did not remember Bugeaud's saying: "It is better to persist in a moderately good plan than to change it." In his case the first plan was the better one.

(c) *The Preparatory Combat*.—I have already shown, in discussing the battle of Colenso, how the British army did not realise what is meant by the preparatory combat.

Was not this responsible for the Boers being almost invariably permitted to rapidly collect a force from other parts of the field and hurry it to the point of danger?

On the morning of the 20th, Sir Charles Warren informed the general commanding the 4th Brigade, which was near Potgieter's Drift, that he had decided to attack, and he asked him to "make a demonstration against the heights held by the enemy in front of him so as to divert their attention."

"A battalion of the 4th Brigade was consequently sent forward and occupied some kopjes and a farm midway between Krantz-kloof and the enemy's positions. Till about 3 p.m. the battalion kept up an intermittent fire without losing a single man. Then the enemy brought up one or two maxims, whereupon the naval guns opened fire from their emplacements on the right bank of the river, and towards 5 p.m. a battery of howitzers came into action at about 2,600 yards from the Boer trenches. During the night the troops were retired on to their original positions. Their comparatively small loss (one officer and two men killed, 13 wounded and one missing), shows without further comment the character of General Lyttleton's operation. It was a mere demonstration, and was quite inadequate for the purpose, which was to effect a powerful diversion that would have been of real use to General Warren." During the three following days, when General Clery's division, on the left flank, was in an unfavourable situation with regard to the Boers, the 4th Brigade made no attempt to divert their attention and draw their force in its own direction.

"At Chieveley, on the 19th, General Barton limited his efforts to deploying his brigade at about 3,000 yards from the Tugela in front of the enemy's positions, and to sending cavalry patrols into the valley, which resulted only in having some men captured. On the 23rd, when information from various sources apprised him of

the fact that Colenso and Hlangwane Hill were unoccupied, he had a reconnaissance made by a detachment of cavalry and a section of field artillery. The officer commanding the detachment reported that the Boers were still occupying their positions."

While the deadly drama was going on with the four battalions engaged on Spion Kop, what were the other battalions doing? Two belonging to the 2nd Division were sent by General Warren and made a half-hearted attempt against the flank. They lost altogether two officers and 16 men, or about 1 per cent. of their strength; this shows the feebleness of their intervention.

Along the rest of the line no one moved!

Can any one say that the British were beaten because they followed the methods which we teach in our great military schools, and which are summed up in the "Duties of the Army in the Field"? We have only to read Article 129 in the latter to see whether the British followed its precepts. They never comprehended the mutual assistance that every portion of an army should aid in giving. This is what caused De Wet the profound astonishment which he expressed with reference to the surprise at Reddesburg. "This affair deserves to be recounted, not only because of our victory, but because the English never came to the assistance of their comrades when in danger. It was the same thing at Sannaspost. It was an unexpected fortune for us on both occasions that the enemy did not put themselves out to rescue the troops engaged." Cruel irony!

The false conception of the preparatory combat on the part of the English (which Gilbert rightly describes as an infantile demonstration) resulted really from an error of doctrine, for all the different commanders on every occasion acted in the same manner. We shall see it again with Wynne's brigade in Natal on February 5th, and we shall see it also in another theatre of war. It was certainly not the fault of the officers concerned, for the British officers showed themselves, on all occasions when called upon, to be brave and of unwavering courage. The entire responsibility rests with the successive commanders who were charged with the training of the army.

Such being the case, the disasters need no explanation, and they have nothing to do with the present armament.

But we must make one exception to this. General Buller's indomitable tenacity and incessant attacks on the Tugela enabled his troops to hold on to Natal. The series of engagements which he fought during the months of January and February form in their entirety an extended phase with the characteristics of a preparatory combat; that is to say, the mission of his troops was "rude and laborious" (Article 129, "Duties of the Army in the Field"). We can affirm that General Buller thoroughly understood and accomplished the task entrusted to him; that he contributed to a very large extent to the victory of the British arms; and that he is entitled to a share of the glory which in England appears to have been almost exclusively given to Lord Roberts.

5. *The Action at Belmont.*

We will now change the theatre of operations and we shall find the same errors committed by another general, Lord Methuen, and, in addition, a marked and unfortunate predilection for night attacks.

In his march on Kimberley, Lord Methuen was informed on November 22nd, 1899, that a detachment of Boers had taken up a position on his right flank near Belmont. He decided to surprise them by a night attack. He began the 22nd by a bombardment which was not only useless but inopportune, for it apprised the enemy of his intentions.

We will take the 9th Brigade as an example of how the dispositions were made for the march. The brigade had two battalions in the first line, each battalion in line of company columns with 50 paces interval; in the second line were a third battalion and two companies. There was no advanced guard and there were no measures taken to guard against surprise. The direction was given by the luminous compass.

"In the night march, the 3rd Battalion of the Grenadier Guards mistook the direction, and the error cost them considerable losses. Later on there was another error in direction, which brought the 1st Battalion of the Coldstreams under the fire of *Mont Blanc* at a range of 800 yards, and Lieutenant-Colonel Codrington, swinging his left slightly round to meet this, became committed to a frontal attack on *Mont Blanc*" (General Colville's Report). The difficulty of maintaining direction at night is very great, especially in the case of large bodies of troops.

The plan of attack, though it was preconceived as at Colenso, was a good one. It consisted in making a frontal attack with one brigade and an enveloping attack with the second. But the defence was organised in depth in three successive lines. The darkness permitted the attack to carry the first of these, but as the position in rear was not as had been supposed, the plan could not be carried out nor could the enveloping movement. "The position of the enemy could now be distinctly seen; and it was clear that the original plan, which gave the 9th Brigade the principal rôle, could not be executed" (Lord Methuen's Report).

In short, the enveloping attack was changed into a frontal attack, and it was only with heavy loss to themselves that the British finally drove off the Boers, whose object was not to make a prolonged resistance.

The British cavalry did not pursue. "My mounted troops were unable to carry out their orders, because on one side the enemy's retreat was covered by kopjes, and on the other the distance was too great."

Remarks.—(a) Against an enemy disposed in depth, all that a night attack can do is to occupy their most advanced position, after which the successive positions in rear have to be attacked by daylight. Moreover, an enveloping attack, whether made by day

or by night, will become a frontal attack, or be itself enveloped, if the enemy has sufficient manœuvring power to shift the axis of his successive dispositions. Darkness and an enveloping movement are not a sure means to success; they have a relative value, but must not be accepted as a guiding principle. The operation will only succeed against an enemy who is glued to his position.

(b) As at Natal, the commander, who had two brigades, retained no force at his own disposal, and his share in the fight was limited to one or two inopportune acts. He gave direct orders to bodies of troops which were really no longer under his orders. Thus, General Colvile's report shows how at one time the whole of the troops, which he had in the second line, received, unknown to him, direct orders from Lord Methuen to move to some other point in the field. The commander, therefore, abandoned control of all his forces, and shortly afterwards took part of them away from the officers who had to carry out the tasks he gave them. The latter had a right to count on these troops, and must have been extremely put out when they found themselves without them, perhaps in a critical situation. This will always be the case if the commander keeps no force under his own hand.

Further, with this system it is a difficult and slow business to send orders to officers entrusted with the execution of a plan. "I also note the difficulty in communicating orders, as the orderly officers had to creep from one bush to another to find cover" (Methuen's Report). The only troops at the disposal of a commander are his reserves, and they should be as strong as possible.

To sum up, at Belmont, as at Colenso, there was a preliminary cannonade;

A preconceived plan;

No advanced guard, or troops to guard against surprise.

No reserves.

6. *The Fight at Magersfontein.*

Lord Methuen proposed to attack the Boer position on the 11th, and on the 9th a cannonade was started with a 4.7 gun at 5,000 yards, which was continued by a general bombardment on the afternoon of the 10th. Lord Methuen explains this action as follows:—"Calculating from the moral effect of our guns in the three previous engagements, and relying also on the results expected from lyddite, I hoped that the fire of the batteries would cause great losses in the trenches, would have a disheartening effect on the enemy, and thus would contribute to the success of the attack which was to be carried out at early dawn on the following day."

Such expectations regarding the effects of the lyddite shells show little reflection. The Boers remained hidden and made no reply. The only effect was to arouse their attention, to make surprise impossible and to be surprised oneself.

The fundamental idea of the battle was again based on a *key of the position*. "The north part consisted of a kopje about three miles long, and its southern spur, which was a very high one, was the key of the position."

The idea of a *key of the position* was naturally followed by a preconceived plan. The attack was to be made by a single brigade, out of the three, advancing by night in mass of quarter column, without advanced guard or flanking detachments. When the order for deployment was being given, the brigade was surprised by a violent fire at 200 yards range from some Boer trenches, the existence of which was not suspected.

"The surprise was complete. The leading battalion, under the hail of bullets which fell around it, was thrown back in disorder on the troops in rear and carried them back. General Wauchope fell mortally wounded. Several officers, however, managed to rally **their men** and to get them forward to within 50 yards of the **enemy's** trenches. But they were soon forced to retire, and the whole brigade sought refuge 400 or 500 yards in rear, where the men lay down or were sheltered by slight irregularities in the ground. Day then broke and the whole British line opened fire. The Highland Brigade, demoralised by surprise and by its heavy losses in such a brief space of time, and with a large number of its officers and non-commissioned officers killed and wounded, was unable to advance, and remained immobilised throughout the day.

"After the check of the Scots, Lord Methuen ordered General Colville to push forward and occupy with three battalions a ridge to the south-east of Magersfontein; the Scots Guards being kept as a general reserve. A little later the officer commanding the Guards Brigade was ordered to support the Highlanders and to send them what reinforcements he could. But, as 'he was threatened himself in front,' he could not take from his first line more than two companies, to which he added half his reserve.

"At midday, as the fortune of the fight was unchanged in front of the Highland Brigade, Lord Methuen ordered the Gordon Highlanders, who had been guarding the convoy, to reinforce them. This battalion made a fresh attempt against the enemy's position, moving directly to the attack in column of half battalions. This attempt was no more successful than the others.

"Towards 1 p.m., after the arrival of a reinforcement from Spytfontein, the Boers tried to turn the right flank of the Scots and forced them to retire to a fold in the ground about 500 yards in rear; this position they maintained till dark."

On the following day Lord Methuen decided to retreat.

Remarks.—(a) As at Colenso, we find no determination to conquer and no powerful effort. This is clearly shown by the casualty returns. Out of three brigades one only was seriously engaged. This was the Highland, which lost 840 men; but the greater part of its losses were sustained in the initial surprise, in the short retirement which followed, and later still in its retreat.

The Guards Brigade, which was engaged all day, and was ordered to support the Highland Brigade, lost 95 men all told.

As to the third brigade, it was hardly engaged at all and lost 12 men.

(b) As in Natal, the British showed no proper conception of the character of a preparatory combat, of mutual support, or of comradeship in the fight. Thus the Guards Brigade did nothing to help the Highland Brigade which was suffering such losses. General Colville gave this explanation in his report: "We received no orders to advance and we had nothing to do except look straight to our front." What can we think of this attitude when we compare it with Skobelev's energy during the days and the morning which preceded the assault on Plevna. When it had received the order to support the Scots, the Guards Brigade, which had nothing to do except "look straight to its front," only dared detach for the purpose an insignificant portion of its force. The part taken by this brigade in the battle, its effort, is shown by its losses, which amounted to 4 per cent. of its strength.

(c) There was no idea of a decisive effort—"the great blow," or the "blow with the fist." Only a third of the force was seriously engaged, and it was reinforced a little at a time by troops which did not do very much. There was no impetus given to the front from the rear, and there was no determination; and then one was astonished at the Boer victory. The progress of modern armament had nothing to say in the repulse of the British at Magersfontein. To sum up, the mistakes were:—

An inopportune bombardment.

A preconceived plan.

No means of getting contact or of protection against surprise.

No bite in the preparatory combat.

No bite in the attack.

Superannuated formations.

Can we on the strength of the foregoing examples condemn the doctrine of our regulations seeing that none of its principles were followed? Is there any lesson to be definitely learnt from the battles of this period with regard to tactics in general? There is only one lesson: avoid what the English did.

B. SECOND PERIOD (LORD ROBERTS).

The arrival of Lord Roberts completely altered the character of operations. "The Field-Marshal's principle was to avoid attacks in brute force. The value of the Boer rifle had been learnt, and coming to conclusions with this arm were to be avoided."

Profiting by his crushing numerical superiority and the passivity of the Boers, Lord Roberts left a force in front of Cronje's positions to contain him, while he himself marched with the rest on Kimberley. Preceded by a strong advanced guard of mounted troops, he passed round the left flank of the enemy's position.

There was no fight; only an admirably conceived manœuvre. Cronje was threatened with being cut off from Bloemfontein which he wished to defend at all costs, so he left his position which had availed him nothing, and filed across the open country where he was quickly and very cleverly surrounded and forced to capitulate.

This is success by manœuvre: there was no attempt to make an attack, and therefore we cannot draw any conclusions as to the advantages or difficulties of the offensive. We can award our praise to the leader who conceived the manœuvre, and we can admire the discipline of the troops who carried it out, and who stoically endured the privations which their want of supplies necessitated; but that is all. And yet, what would have happened if Cronje, instead of remaining impassively in his trenches, had followed the advice repeatedly given him, had escaped, and had retired foot by foot aided by De Wet. If he had done this and had combined with it enterprises against the ill-guarded convoys of the British, would not the latter soon have had cause to repent leaving the railway so far behind them. Manœuvre must be answered by manœuvre and not by a passive defence: this is the only tactical lesson to be drawn from the operations of Lord Roberts against Cronje.

However, the war was not ended, and the resistance of the Burghers after the capitulation of Cronje, if it astonished the world, did not disturb the commander of the British Army. He had nothing to confront him except undisciplined bands which had no real strength in them. For the commandos were composed of men always ready to desert, and with difficulty rallied by their leaders, who were men of indomitable energy but without real authority. It was sufficient to threaten the flank of one of these units to put it to flight. De Wet's book is very instructive on the subject of the Republicans' spirit at this time.

Against forces of this nature, the Commander-in-Chief employed the most suitable tactics, but there is nothing new in them; our officers have practised them continually in our colonies. The main idea is to avoid losses, therefore attacks are not made. An eye-witness, whose accounts have been published in the "*Revue des Deux-Mondes*," describes the procedure perfectly.

"The troops march on an enormous front in small columns. Each column is constituted so as to be numerically superior to any hostile force which it may meet. In a brigade, the four battalions formed four parts of a kind of very open double column, with 250 to 300 yards distance between the battalions. In each battalion the eight companies were each formed in single rank, 100 to 120 yards behind each other; in each company the interval between the men was from 2 to 3 yards."

The essential condition, then, is to have such numerical superiority that each column shall be numerically superior to anything it may meet, or that the columns should at least be within supporting distance of each other. Let us take the conditions of a European war and ask whether this crushing

numerical superiority can be obtained,—we know that it cannot. Further, the columns will not be able to march over the bare plains of the veldt in view of each other, so that they can always be ready for mutual support. Where would it be possible in Europe to make marches of a whole day across country with units deployed in one rank at 3 yards interval, on a front, say, of from 600 to 700 yards? What would become of this scientifically designed formation scattered over an enormous front without reserves, if the enemy, in very superior force, attacked one or two of the columns when they had entered a defile, of which there are so many in European countries—a defile, for instance, between wooded mountains.

These methods are only called for and justified by the quite exceptional conditions which the English had to deal with; a considerable numerical superiority, a country without obstacles, an enemy uniformly on the defensive, and without the knowledge of manœuvring. The danger of such a formation on the march was apparent to some of the spectators. After the action of Brandfort (May 3rd, 1900) one of them expressed his views thus: The front of the British army, between its extreme wings, did not measure less than $11\frac{1}{4}$ miles. A line like this could have no power of resistance, and the lines forming integral parts of it were not in touch between themselves. Lord Kitchener anticipated the criticisms which the new order of things may evoke. *We know the tactics of the Boers now: with people who do not attack, you may dare everything.*” In this we have all the psychology, all the justification, of Lord Roberts’ tactics; the enemy will not attack, neither will he manœuvre.

In front of this deployment, the mounted troops with horse artillery fought a very prudent demonstrative dismounted fight up to the effective range of the rifle, 900 to 1,100 yards. This fully sufficed to hold the enemy, who immobilised himself in his trenches, which he never left until other mounted troops threatened one of his flanks, when he hurried off. His retreat was nothing less than a flight, and an active cavalry would have ruined his chances of standing again on the defensive. But, for reasons which we will not go into here, the British cavalry never pursued.

Such are the tactics which the opponents of Napoleonic tactics wish us to adopt. The following is what an eye-witness on the Boer side said after the fight at Brandfort: “This theatrical deployment presented a fine spectacle; but it is needless to say that it would have been of little use against a European enemy, even of small manœuvring power. The uniformity of the deployment, the lack of depth, the lines exposed to every shot, the enveloping action preceding the frontal action, all would contribute to the loss of the side which adopted such antique methods against troops, even very inferior in number, but whose tactics were based on distribution in depth and on the unequal division of their efforts.”

Sometimes the envelopment of one or both wings could not be effected; on some occasions small parties of Boers were able to check the enveloping attack, on others even to menace it. It was then necessary to attack the centre, which was done with a proportion of from 10 to 15 men to one. The fight then proceeded with the slowness and prudence of a preparatory combat, only our preparatory combat is more vigorous. There was no need for the employment of reserves, which, as a matter of fact, were non-existent. If the line was broken at a single point, a stampede of the enemy resulted; for it should be noticed that throughout the second period of the war the Boers had only one line of defence, it had no depth in it and there were no troops to support a retirement. In these circumstances, a gap made at a single point forced the position to be abandoned. This lack of depth in the defence is explained by the state of morale of the Boers, who during this period were incapable of an energetic resistance; and also by their numerical weakness, which compelled them to distribute their force along the front and so utilise all their rifles in the first line.

In short, there are no tactical conclusions to be drawn from Lord Roberts' operations.

C. THIRD PERIOD (LORD KITCHENER).

When Lord Roberts left, the war took quite another character. Only the braver and more enterprising Boers remained at the front. They began to be disciplined by hardy, bold, and energetic leaders, and carried on a partisan war which arouses our admiration but gives us no enlightenment on future wars.

The advocates of envelopment may deduce from it something new in tactics, for the Boers acted always by surprise and envelopment; but they only made attacks on outposts and isolated detachments. Such operations have nothing in common with the war of armies with which we must concern ourselves.

FOURTH PART.

LESSONS FROM THE SOUTH AFRICAN WAR.

A. ERRONEOUS LESSONS DRAWN FROM THE SOUTH AFRICAN WAR.

Every kind of fancy ran riot in the conclusions drawn from the South African War. The change in armament would not only produce an evolution in the methods of handling troops, but even a revolution in the art of war. We need not let this agitation greatly affect us. It has been repeated, more or less excitedly, whenever there has been any serious transformation in armaments: its conclusions have always been similar, and they have always been contradicted by facts, because there exist certain principles which are the essence of war. The most persistent of these principles is that of the absolute necessity for a blow in force which will decide a stubborn enemy to confess himself beaten. The form which this blow will take will vary according to conditions of armament, but the necessity for it is none the less constant.

The Utopia of wishing to make an enemy take to his heels without running any risks oneself, explains the prolonged and distant bombardments at Plevna and in South Africa. It also accounts for the introduction of field howitzers with high angle fire, and of heavy artillery, with the object of obtaining moral as well as destructive effect. When, however, we come to practice, we perceive that all this is merely a bogey to frighten sparrows. The sparrow is scared at first, but recovers from his fright and comes back again. The enemy lets the storm of shell pass over his head and finds the means to protect himself against it. In short, we see that risks must be run and losses incurred; at all times victory has been dearly paid for. We fight against morale, and it is morale which wins when we attack, provided that the offensive takes a form which is suitable to the new conditions.

1. *Inviolability of the Front.*

The most dangerous conclusion drawn from the Anglo-Boer war was that of the *inviolability of the front*.

We have seen from several examples that the British made no attempts to violate the fronts defended. They approached them with only a small proportion of their force which, as the casualty returns testify, never pushed the attack home. Their chief losses,

too, were in consequence of terrible tactical faults, amongst others the frequency with which the British army allowed itself to be surprised. This was because there were no troops to guard against surprise, and no troops to reconnoitre; in other words, there was no notion of an advanced guard.*

Another point is that the British, except on a few occasions, never managed to obtain *superiority of fire* against the point of the principal attack. To put it briefly, the whole question of the decisive attack amounts to this: the decisive attack becomes possible when the attacker has been able to attain superiority of fire; the fire of the adversary has then either very little effect, or is altogether harmless, according to whether the superiority of fire is less or more pronounced. In order to obtain superiority of fire in a given quarter, whether it be on the wing or in the centre, superior means for producing this fire must be collected in that quarter, and the efforts of all available troops must be concentrated for the purpose. This is what the British failed to do, and then people conclude that the front is inviolable.

Certain facts in the campaign affirm, on the contrary, that frontal attacks are possible when once superiority of fire has been obtained. It is evident that the infantry, unaided, are less and less able to open a way for themselves by means of their own fire, especially in front of an entrenched enemy (Part V, Law 1). But in the artillery they ought to find an ally, who will the more easily open the way for them now that guns are so much more powerful (Part V, Law 3). When, by chance, co-operation between the two arms was complete, the attacks were successful, whether they were made by the British or by the Boers. We will quote several examples:—

(a) At Talana Hill the strength of the infantry on either side was about equal. The British had three batteries and the Boers had one. The British made a frontal attack which was successful for the following reasons:—

- (1) The infantry in their advance made use of what cover there was, first a wood and then a wall of loose stones.
- (2) The artillery acted continuously in co-operation with the infantry. After it had silenced the enemy's battery, it energetically supported the attack with two batteries

* We find on both sides the idea of making war "by breaking as few eggs as possible," as Villebois-Mareuil puts it.

On the Boer side, as numbers were few and could not be replaced, to diminish the breakage was a wise measure from their point of view, though unfortunately it deprived them of all spirit of the offensive on occasions when it was to their entire interest to have acted in a bold spirit.

With the English the army is mercenary, it represents a certain amount of capital, and the tendency on their part has been explained by the following reasons. "The English wish for the maximum profit with the minimum cost. This is why their army did not produce results in proportion to its strength. British generals feel that they are responsible for the national weapon which has been placed in their hands and dare not put it to too rough a proof." This opinion is probably correct. We shall see, from the Manual of Combined Training which he issued to the army after the war, that Lord Roberts appears to think that a vigorous battle at the commencement of operations would have been less costly, in spite of its attendant sacrifices, than a long campaign.

which, without changing their position, prepared the infantry advance (breaching batteries); while another battery accompanied the infantry and rapidly crowned the position. The British in this way had two arms against one, and the fight was conducted exactly according to the principles contained in our regulations.

"In spite of the absence of cover, the movement was executed without serious loss, thanks to the efficient fire of our artillery . . . whose fire caused a lull in the enemy's fusillade and allowed our infantry to go forward." (General White's report.)

(3) The Boers had not had time to entrench themselves.

The British lost 226 men,^a or about 6·3 per cent. of their strength; the Boers 30 men, or about 1 per cent.

(b) The fight of Elandslaagte is perhaps a better example than the last. The British attacked and won. They were, it is true, numerically the superior—3,000 men at least against 800—but so also were Generals Buller and Methuen, when they attacked the Boers later without success.

General French's conception of the attack was a judicious one :—

- (1) An artillery combat with two batteries against two pom-poms. The contest was at first unfortunate for the British artillery, but was decidedly in its favour later on, and then the British had two arms against one.
- (2) A preparatory combat with one battalion, which got within 800 yards of the enemy in an excellent formation with a front of 490 yards and a depth of 1,300 yards. The battalion tied the enemy down by a fire-combat.
- (3) An enveloping attack by two battalions. These did not completely carry out their enveloping movement and were obliged to make a frontal attack. But their advance was made by rushes of 50 yards and it was supported by a continuous artillery and infantry fire. The attack crossed in this way a glacis of 1,000 yards.
- (4) A pursuit by the cavalry (five squadrons) which completed the defeat, increased the enemy's losses and made 107 prisoners.

Killed and Wounded.—British, 260, or 2·7 per cent. Boers, 85, or 10 per cent. With the exception of Spion Kop this was the heaviest percentage of loss incurred by the Boers in the war, viz., 85 killed and wounded, and 107 prisoners; total, 192, or 24 per cent. This result was obtained because the fight was conducted by a real leader, General French, who had under him good troops, those who had been in Natal before the war, or who had come from India. Moreover, they were troops who were not yet demoralised, which shows that the question of morale in war is of more importance than the question of armament.

Speaking generally, on all occasions when the artillery was well employed, it opened the way for the infantry.

(c) In the attack on Val Krantz (February, 1900), the Durham Light Infantry carried the salient with the bayonet. "It met, properly speaking, no resistance. The shells had swept the place, and the British infantry saw about 50 men flying in front of them, about all that had remained in the trenches."

(d) At the fourth attempt to relieve Ladysmith, General Buller tried to turn the enemy by Cingolo and Monte Christo, and then attacked his left flank. "During this attack in *échelon* with the right in front, the artillery and naval guns rendered great service by shelling the successive positions of the enemy till their own infantry got *within short range*. The enemy had to vacate their position hurriedly, abandoning a large number of dead and wounded and some prisoners" (official report). The attack succeeded because the artillery had opened the way to *within short range*.

(e) On February 27th, 1900, the British made a frontal attack against Pieters Hill and succeeded. "The naval guns prolonged their fire against the enemy's trenches till the skirmishers were within 15 yards," and in so doing the naval guns did right well.

(f) We need not return to the Boers' attack on Spion Kop. It is a proof of what can be done by co-operation, and, above all, by determination.

Hitherto we have only noted the success of the frontal attack when made with the double support of infantry and artillery fire. More rarely, it is true, and the reason requires no explanation, infantry alone was able to open a way for itself by its own fire and by a skilful use of the ground.

(g) At Enslin, November 25th, 1899, the detachment of Marines, a force which has little experience of working in extended order, lost 33 per cent. of its men, and its attack failed. "The men of the Yorkshire Light Infantry, who were more accustomed to this kind of work, came up in support of the Marines; they knew how to maintain a formation in open order and how to adapt it to the ground. They crept up to the foot of the hill, climbed the heights and drove the Boers off them." Even the frontal attack can succeed, although without artillery support, if it is well carried out and has the necessary depth; in this case the latter was ensured by the Yorkshire Light Infantry being behind the Marines.

(h) Still more instructive is the fight at Nicholson's Nek, the details of which, as given by De Wet, have an undeniable appearance of authenticity. According to his account, 360 to 370 Burghers, only 200 of whom were actually engaged, attacked without guns two British battalions which in their first position were sheltered by rocks and old kraals," and in their second position found still better cover behind "regular walls of rocks."

Here is an instance of a fight between infantry and infantry where the attacking side was numerically inferior to an extra-

ordinary extent and yet caused a regular disaster to their enemy.

It was because the Boers knew how to escape loss by skilful use of the ground, and because they kept as well under cover as their adversaries, except when making short rushes forward. It was also because a continuous fire covered the advance of a rush, and, finally and above all, because their fire was extremely accurate. Speaking of the British, De Wet says: "We could barely see the barrels of their rifles; sometimes a head emerged and then another, and our Burghers who were on the look-out did not miss."

Thus, in this fight of disproportionate numbers, while the Boers who attacked lost 9 men killed or wounded, the defenders left more than 200 dead on the field (De Wet). How can we explain the poor effect of the British fire? De Wet says simply, "The British were demoralised by the accuracy of our fire and lost their heads."

Therefore an attack can be made, and successfully, given superiority of fire. This superiority of fire can be gained not only by a superior number of rifles, but also by *good shooting* and by *determination*; these two things exert an effect on the enemy and make his fire but little dangerous.

The lesson we should learn is, that with modern arms *skill* and *morale* are factors whose importance ever increases at the expense of that of mere numbers. A nation has nothing to fear if it makes the necessary sacrifices for the proper instruction of its army, and if it gives the whole of its youth a virile education, and so imbues them with a temper of determination. Fronts are not inviolable, but to violate them, we must:

(1) Gain superiority of fire.

(2) Pay the price.

With what confidence we listened, a few years ago, to the brilliant commander of the 7th Army Corps* when he said in one of his criticisms on the ground: "superiority of fire must first be obtained, then there remains *nothing to do but to go straight forward*."

(a) *The Origin of the Doctrine of the Inviolability of the Front.*—How is it that the war in South Africa has produced, more than any other, a regular disturbance and upheaval of ideas? The reason is because it was a war made by a European nation against an army acting in quite exceptional conditions.

As I have decided to deal with nothing but tactics, I shall not take into account the respective moral conditions of the two opposing armies, which perhaps pretty well balanced each other. I do not intend to make a philosophic study of the war, for this has already been done very carefully and judiciously by Gilbert†; I shall confine myself to purely technical and tactical matters.

The dominant feature in all the battles, which were, accurately speaking, nothing more than fire combats, was the quite exceptional

* General de Négrier. Trans.

† "La Guerre Sud-Africaine" by Capitaine G. Gilbert, 1902. (General Staff).
(3875)

skill of the Boers in individual fire. This remarkable aptitude resulted from their habits as big game hunters which not only made them good shots, but gave them a quick eye and taught them how to make use of the slightest advantage in the ground.

These qualities of the Boers explain almost entirely the difficulties which the British had in establishing superiority of fire; difficulties which were all the greater owing to the fact that they never went the right way to obtain it.

Let us admit, for example, that a Boer rifle was worth from five to six British—which is not very far from the truth—and we shall then have an explanation of a considerable number of the facts of this campaign.

The truth is, that whether the Boers attacked or were on the defensive, their losses were absolutely insignificant, and the proportion of their losses to their effectives was very much smaller than that of the British.

The following table below shows this. There may be a few errors in the figures showing the effectives, but, even if these were corrected, the results would be very little altered and the conclusions to be drawn would remain unchanged.

Engagements, 1899-1900.	British.			Boer.			Percentage of Boer Losses to British Losses.
	Effectives Engaged.	Number of Killed and Wounded.	Percentage of Loss.	Effectives Engaged.	Number of Killed and Wounded.	Percentage of Loss.	
<i>Tatama Hill</i> (20.99)	3,600 (?)	226	6.3	3,500 (?)	30	.9	13.2
The British attacked ... and were successful							
<i>Elandsagte</i> (21.10.99)	3,400 (?)	290	7.6	800	85 (a)	10.6 (a)	32.7
The British attacked ... and were successful							
<i>Reitjontein</i> (24.10.99)	5,500 (about)	125	2.3	1,000 (about) (De Wet)	32	3.2	25.6
The British made a demonstration							
<i>Nicholson's Nek</i> (30.10.99)	1,450 (about)	200 (at least)	13.8	370 (at the most)	9	2.4	4.5
The Boers attacked with success	10,190	483	4.7	1,800	18	1.0	3.7
<i>Madder River</i> (28.11.99)	2,200 (about)	81	4.0	1,700 (about)	34	2.0	42.0
The British attacked; neither side won	11,450	895	7.8	4,000 to 5,000	100 (about)	2.0 to 2.5	11.2
<i>Stormberg</i> (10.12.99)	16,500 (about)	909	5.5	4,000 to 5,000	24	.5 to .6	2.7
The British attacked and were repulsed	20,000 (b)	520	2.6	(?)	99	...	19.0
<i>Magersfontein</i> (11.12.99)	3,000 to 3,500 (c)	739 (d)	21.1 to 24.6	460	199	44.2	27.0
The British attacked and were repulsed							
<i>Colenso</i> (15.12.99)							
The British attacked and were repulsed							
Fourth attempt (17 to 23.1.1900)							
<i>Spion Kop</i> (24 to 25.1.1900)							

(a) Not including 107 prisoners captured in the cavalry pursuit.

(b) More or less engaged.

(c) Including only the four battalions which defended Spion Kop.

(d) Not including 81 missing.

Did improvements in modern firearms and especially the introduction of smokeless powder alter the balance between the two combatants? Certainly not. In 1881 the Boers and English opposed each other, and their armament then was almost identical with that of the Turks in 1877, and black powder was used. The comparative results were not only the same, but the relative losses of the British were even greater than in the last war.

Engagements, 1880-1881.	British.			Boer.			Percentage of Boer Losses to British Losses.
	Effectives Engaged.	Number of Killed and Wounded.	Percentage of Loss.	Effectives Engaged.	Number of Killed and Wounded.	Percentage of Loss.	
<i>Bronkhorstpruit</i> (20.12.80)	250 (about)	139	55.6	(?)	6	(?)	4.3
The British were attacked and defeated	1,050 (about)	196	18.7	1,000 (about)	43	4.3	21.7
<i>Lang's Nek</i> (28.1.81)	500 (at the most)	207	41.4	500 (but far fewer at the beginning)	18	3.6	8.7
The British at first attacked, but were attacked in turn and surrounded	460	240	52.2	450 (about)	7	1.6	2.9
<i>Majuba Hill</i> (27.2.81)							
The Boers attacked with success							

These facts show in a most evident manner that, in fire combats, the Boers had an incontestable superiority over the British, and that it was quite independent of the question of armament. For the superiority was even more evident in 1880 than 20 years later.

It is not surprising then that in a purely infantry combat a greater force would be required to gain superiority of fire over rifle-shots like the Boers than against an European enemy. Against troops like these, artillery should be used in great force and at the proper moment. This the British never managed to do.

People then conclude that fronts are inviolable instead of recognising two things: that the men employed to violate the front were insufficient, and that instruction in rifle shooting is most important.

(b) *Invisibility*.—The peculiar nature of the ground in South Africa had a great deal to do with the invisibility of the Boers, but not so much as the skill of the Burghers themselves. In any case if we start off with the premise that one Boer rifle is worth five or six rifles of any European infantry, it is evident that it is easier to get cover for one man than for five or six, especially behind rocks.

The following anecdote of the fight at Nicholson's Nek, which is related by De Wet, shows the case clearly.

"As we were pushing on from rock to rock, a shopkeeper who was frightened by the fusillade rushed into the middle of us, like a sheep surprised in a storm, and went up to a Burgher who had got his rifle up to his shoulder, and was under good cover behind a rock.

" 'Sell me your rock for half a crown,' he implored.

" 'Not I; but what do you want it for?'

" 'To hide behind it.'

" 'But what am I going to do?'

" 'Fifteen shillings,' continued the shopkeeper, crouching down as the bullets went over him.

" 'Go to the devil. I am not here to do business.' "

Going over our own country, I have seen very few positions or localities where a force of any strength could have a good field of fire and remain invisible. I think, therefore, that we ought not to exaggerate the amount of benefit which an enemy can gain from invisibility in the heat of the battle. Invisibility is of the greatest value as long as it is only a question of small detachments or of operations for gaining contact with the enemy. But it disappears almost entirely as a factor during the period of the decisive attack and it does not alter its conditions in any way.

(c) *Musketry Instruction*.—How did the Boers attain to that remarkable standard of shooting of which they gave such proofs during the war? It was by practising almost daily from their early youth, especially after game. To be a moderate shot is almost a disgrace for a young burgher.

Can we hope in a short service army to make every infantryman, or even the greater number of them, first-class shots? It is extremely improbable that we can do this with an annual allowance

of from 200 to 300 rounds, the greater part of which are fired on the range. There is no doubt that we can hope for better results by means of improved methods of instruction, which it is our duty to discover. But it is no use having any illusions as to the importance of any improvements which we may possibly realise.

The Boers, in addition to their skill in shooting, have a placid temperament, a keen vision, and above all a cool head in the fight. The last is their predominant characteristic.

It is difficult to alter a man's temperament, and though a man's vision appears to be capable of improvement by suitably exercising it, in a short service army the time is too limited to do much good. Cool-headedness can only be given to youths by a really virile education, and, to attain it, a youth must be made to face danger by means of exercises which are not without their spice of it. His family, his masters, and professors ought to prepare our task by giving a boy a sound moral and physical education. It is our task also to instruct and improve him, but we are fettered by the shortness of the time at our disposal. If they are able to give us young men who can calmly and fearlessly look danger in the face, we will easily make good by quality our deficiencies in numbers.

Be this as it may, it is most unlikely that in any ordinary war the infantry on one side will be crushingly superior to the other in shooting. The difference between them will certainly not be as marked as it was between the Boers and the British. We must guard against all exaggerations about the extension of fronts, and also against any exaggerated theories about the difficulties of the attack.

How to obtain superiority of fire against a point is always a problem for the attacker to solve, and in my opinion the solution of it for the commander who adopts the offensive becomes easier as firearms increase their destructive and demoralising effects, provided always that the commander has determination and knows what he wants.

2. Cavalry and Mounted Infantry.

(a) Cavalry.

Floods of ink have been poured out on the subject of cavalry by writers who are more authorised to deal with the subject than I am. I will for this reason go rapidly over it.

On what grounds is the failure of cavalry based ?

1. *Capitulations in the Field.*—The large number of capitulations in the field were absolutely abnormal and were due to the fact that the British cavalry used practically no precautions against surprise. I have unfortunately no details of what happened on the day of Talana Hill, when three whole British squadrons were made prisoners in an isolated engagement at some distance from the main action. But all the other surprises of British detachments show the way in which cavalry carried out the duties of reconnaissance and protection. I refer the reader to a most

typical example, that of Sannah's Post, a full account of which is given in De Wet's book. An eye-witness wrote as follows about the same action.

"As for the British, their conduct was hardly conceivable and can be with difficulty criticised. A camp, with troops composed chiefly of cavalry, which had no system of protection and was in the most complete ignorance of what was going on in its vicinity; a convoy which started off without the smallest patrol in front; a cavalry which charged a ditch like the Spruit; an artillery which exposed the whole length of its column while manœuvring within 600 yards of the Boers, &c. The whole is incomprehensible from beginning to end. And it never occurred to the unenterprising cavalry which was on General De Wet's flank and rear that any sort of manœuvre against the Boer's rear might save the situation."

2. *Difficulty of Reconnaissance*.—It is very clear that reconnaissances by cavalry are increasingly difficult in face of modern weapons and that the results to be obtained from them are greatly diminished. I do not, however, consider that cavalry has lost any of its power of investigation against an enemy on the march.

The Boers were generally in position; they were all mounted and were essentially mobile; they were exceptional shots and knew how to get the best advantage out of the ground; finally, they had no uniforms to distinguish them from those farmers who were not fighting.* The British cavalry had, therefore, to encounter a series of great difficulties, such as would not be met with in any European war.

The lack of information afforded by the British cavalry may be attributed then partly to certain difficulties which were quite peculiar to the campaign, but also to a deficient military training before the war. We saw how at Colenso the British cavalry brigade lost two men all told, and at Magersfontein the cavalry lost 1½ per cent. of their strength. Does this show any enterprise?

Further, the statement that the cavalry could furnish no information was a greatly exaggerated one. Lord Methuen sent officers' reconnoitring patrols from Orange River, "and ascertained with certainty that a strong Boer detachment was entrenched to the south of Belmont." On the evening of November 22nd a reconnaissance of lancers and mounted infantry "engaged the Republican outposts near Thomas' Farm, and confirmed the information that they had not left the position."

On the day before the affair at Stormberg, "Brabant's Horse (160 men) arrived in the afternoon, and sent reconnoitring parties in the direction of Stormberg; they saw a patrol of 50 Boers and reckoned that there were about 1,100 in the position."

Cronje always received the fullest information regarding Lord Robert's movements.

Cavalry can nowadays see less, that is quite certain; but reconnaissance has not completely ceased to be a part of its duties, as

* We may consequently ask whether the British would not have been justified in refusing to their adversaries the rights of belligerents.

people would try to make us believe. Reconnaissance duties require good horses, bold men, and good riders, and not mounted infantry.

3. *Cavalry in the Fight*.—We are told that the power of firearms at the present time renders the rôle of cavalry impossible in the fight, at least by shock action. It seems to me, on the contrary, that modern arms, by their demoralising power of surprise, place at the mercy of the cavalry any troops who allow themselves by their own fault to be surprised by fire. For example, if the Boers at Colenso or Magersfontein had had, instead of mounted infantry, several well trained and well led squadrons with confidence in their horses, their swords and the charge, would not the British battalions have fallen an easy prey to them when they were surprised in close formation by rifle fire at short range? Several squadrons falling on these troops, whose only thought was to find cover, would not have sustained much loss even from the best rifles in the world, for in the *mêlée* the fire of the latter would have been quite as dangerous to friend as to foe.

What could not two or three squadrons of Boer cavalry have done at Sannah's Post, if they had thrown themselves on the British troops while their cavalry, artillery and convoy were all mixed up pell-mell under the fire of De Wet's rifles.

When General Warren attacked the heights of Taba Myama, would not the mounted infantry corps of Lord Dundonald, which had already turned the Boer right, have been far more efficacious if it had acted as cavalry against the very vulnerable rear of the Boers instead of adding a few more rifles to the frontal attack? What an ideal opportunity for a raid was lost there, and how galling it must have been for the officer commanding the mounted troops to have been called back? The order was most inopportune and it showed a very defective knowledge of the rôle of cavalry. This arm can only give what is demanded of it; and the British commander asked nothing from it.

4. *Cavalry in the Pursuit*.—It is said that cavalry is no longer able to pursue because there will always be some rifles to stop it. Is the fight at Elandslaagte forgotten, where the British cavalry pursued with such success, decimated the enemy, and made numerous prisoners? This was the only fight where the Boer losses were comparatively heavy, because the cavalry took an effective part in the engagement, especially in the pursuit (see tables, page 91).

From Paardeburg to Bloemfontein the British cavalry were unable to act in an energetic pursuit, because their horses, which had been for some time on half-rations, were broken down. We are not able to account for their inaction later on, when every fight ended on the part of the Boers in a regular flight, which a witness describes as follows :—

“The rout then became complete, and the road we followed presented a lamentable spectacle. There were no longer any leaders, or commandos—only demoralised individuals and an

extraordinary pell-mell of men and carts." A sight like this led the writer in question to the following reflection. "We can only ask what the effect would have been if a British squadron had suddenly appeared on the top of this disorganised mass whose safety depended on the will of a few scouts happening to be in the direction from which danger threatened."

De Wet is quite as explicit in his description of the rout of the commandos after Poplar Grove.

"They fled and fled and no one tried to keep near his comrades. It was a flight such as I have never seen and as I never hope to see again, even if I have to die to avoid the sight. Guns, carts, wagons and burghers all rushed down from the positions and were mixed up in a most abominable pell-mell."

But the British cavalry did not pursue. It cannot be said that they were checked by rifle fire, for they made no attempt to do anything. It would appear that Lord Roberts either dared not expose his cavalry or had no confidence in them; and he was wrong when he had a leader like General French under him. It would be curious to know what the latter's feelings were in the circumstances. The British cavalry did nothing, because no attempt was made to make it do anything.

(b) Mounted Infantry.

Certain people would now wish—the question has been brought up in the War Budget for discussion in Parliament—to transform cavalry into mounted infantry, and to give us the following as the mode of fighting for the future:—

"The troops of the enveloping attack remain mounted. They advance from their cover in troops of from 25 to 30 men, 5 or 6 yards apart. In the squadron there is an interval of from 100 to 125 yards between the troops."

They march thus in zig-zag formation with the object of approaching the enemy.

In this way the troop, still mounted, is scattered in a cloud of horsemen from 5 to 6 yards apart. Has any one reflected what the result would be if a well-led regiment fell with drawn swords on this crowd? There would be nothing left for the scattered horsemen except an immediate and shameful flight and an irreparable defeat.

Let us consider them next in the fight. They attack like infantry and leave their horses some way behind them. How easily could these groups of horses, held by a few men, be scattered by some squadrons of cavalry. But the squadrons, it is said, will be checked by the fire of dismounted men. To begin with, this will mean so many less carbines in the firing line. But can these moderate or, at the most, ordinary shots—for they are not Boers—stop a resolute charge? Will it not be sufficient in any case to dismount a few men with carbines and so contain the few dismounted men who have to defend these herds of horses?

And, if needs be, would not fire alone be good enough to disperse the troops of riderless animals and reduce the men, who are fighting some way off on foot, to infantry without valises, without food, and soon even without cartridges.

Moreover, a mounted man fighting on foot does not like to be separated far from his horse, and quite naturally, for it means everything to him. In fact the following was said of the mounted infantry after the battle of Colenso :—

“It was seen then that there is no infantry less mobile than mounted infantry, when it has dismounted. The men *anxiously looked in the direction of their horses*, as towards their line of retreat, &c.”

The whole psychology of the dragoon foot-soldier is contained in these lines. They explain why the dragoon or the mounted infantryman always transforms himself into a cavalryman. His arm is his horse ; he understands this, and feels it, and becomes by force of circumstances a cavalryman.

Does this mean that cavalry are never to use their carbines ? No one has, I believe, and no one ever will uphold such a theory. Improvements in firearms have rendered this particular weapon more and more useful, one may even say indispensable. Its employment has become more frequent and more justified in every phase of the engagement ; before, during and after the battle, and perhaps even in the cavalry encounter. The cavalryman should be taught to get full value from his carbine, to have confidence in it, and to use it without hesitation when occasion requires. But his principal arm is and always will be his horse ; and he ought to set himself to learn how to handle it with boldness and ease.

Mounted infantry will never render services in proportion to their cost.

What are we to conclude from this discussion ? It is very important to give infantry the pace which they lack. This cannot be denied. But are we to do this by doing away with the cavalry ; that is to say, by turning this arm into mounted infantry ? Certainly not. Cavalry has important missions which it must perform mounted, while still attaching great importance to its fire if the necessity arises for it. Mounted infantry would be incapable of performing these missions if it were given merely a rough training in riding. If, on the other hand, it were given good horses and a thorough training in riding them, it will always change itself, and quite rightly, into cavalry.

The “Broad Arrow” of January 17th, 1903, contained an article which is said to have been inspired by one of the British Generals who came much to the front in the South African war. The article sets forth as follows the inconveniences of mounted infantry :—

“Though they were indispensable in South Africa, they would be less useful in European war. There are, besides, various objections against this description of force. Firstly, if not kept up in

peace—and to maintain them permanently would involve considerable expense—they would be but imperfectly trained in equitation; secondly, mounted infantry are as helpless when in the saddle as are artillery when limbered up; thirdly, when actually fighting, unless exceptionally favoured by the ground, they are obliged to leave their mounts some distance in the rear, and thus cannot quickly follow up an advantage by pursuit; fourthly, when they are dismounted any demonstration against their horses must necessarily make them nervous and deprive them of dash. If employed in Europe they would always be liable to a sudden attack from the enemy's cavalry."

We must seek some other way for the solution of the problem, viz., how to give pace to the infantry, for it is a very important one. We must try and realise this desideratum by some organised means or by using those which chance may give us.

(a) *Organised Means*.—(1) Horses. Infantry men might be mounted on horses which are not suitable for the cavalry. But apart from the disadvantages attending mounted infantry, which have already been pointed out, these horses are indispensable for supply units of every kind, whose requirements will be met with great difficulty on a general mobilisation. On the other hand, in a colonial war, it may be advantageous to form a number of mounted infantry units if the resources of the country permit.

(2) Bicycles.—These machines can be employed in a country well provided with good roads; unfortunately their usefulness depends on atmospheric conditions. Nevertheless, I think that well-handled cyclist battalions might render very important services, especially if they are employed as very mobile reserves which could be sent rapidly to a threatened point to gain time before the infantry came up.

(b) *Extemporised Means*.—In a European campaign the small number of horses which can be spared are best utilised in draught. For a two-horse vehicle would carry about 12 men, and there is generally no lack of carts and wagons. The total number of men, however, which could be carried in this way will always be very restricted. Vehicles are especially useful in carrying the men's valises, for, if lightened of these, infantry can easily increase their pace from 4 kilometres ($2\frac{1}{2}$ miles) to 5 kilometres ($3\frac{1}{8}$ miles) an hour, or even more.

(c) *Conclusion*.—Our cavalry can, therefore, reassure themselves. While the battle is going on they will still find occasions for brilliant charges against troops which have been demoralised by a sudden and crushing fire; bold raids in rear of the enemy's army will still place at their mercy the very vulnerable organs which are so essential to the existence of those armies; more than ever will they be able to distinguish themselves in the decisive attack by a charge in mass (Part V, Law 3).

One of our generals, who is essentially a practical soldier, has been credited, very wrongly I think, with the idea of wishing to transform cavalry into mounted infantry. We will see what he

conceives the *rôle* of a mass of squadrons to be when one move will decide either victory or defeat.

"Suddenly, with an officer to show him the way, the General rides at full gallop to where he can get a good view of what is going on. The place and the moment are favourable, and the order is given to advance. The regiments leave their last cover and cross at a trot in simple and lithe formations the inevitable incumbrances which are formed in rear of an army fighting. Finally their own lines are passed, and the regiments break into a gallop. At a gallop for miles, at full gallop through infantry, artillery, and obstacles of every kind; at a gallop till everything is left behind, for they must capture the defiles on the lines of retreat.

"The gap is made, the critical movement has been accomplished, the panic has started. Victory is within grasp; it needs one more effort from the other arms, and it is gained" (*Revue des Deux Mondes*, January 1st, 1903).

Would mounted infantry be equal to this long fast gallop of several miles across obstacles of all sorts? For such a task, bold men, first-class riders, and excellent horses are necessary. Besides the author himself assigns to mounted infantry its rightful place; in speaking of cavalry, he says "Cavalry is afraid of being transformed into mounted infantry, but no one thinks of doing this, for the latter has no *raison d'être*, except in the Colonies" (*Revue des Deux Mondes*, December 15th, 1902).

What the author demands, and what we all demand, is that cavalry should use to the utmost the new power with which it is invested; that is, its carbine and artillery fire, and that it should get the maximum benefit from them. I think that everyone is in accord on this point, even in the cavalry. But then we must give the cavalry what it wants for this purpose.

First, full-sized ranges and a liberal supply of ammunition in peace time for instructional purposes. Secondly, a lighter kit and equipment, which will make it easier for them to fight on foot, will allow them to carry more cartridges and at the same time increase their pace and radius of action when mounted. If this were done, we would soon see that our cavalry soldiers would be little averse to using fire action, although they would still maintain as their essential action the shock. Modern armament greatly increases the importance of their *rôle*. So great has this importance become, that the tendency of military powers is to increase their cavalry up to the maximum that their remount resources will permit. This tendency is especially noticeable in Germany, and it is quite a correct one.

Does the increased use of fire in the cavalry necessitate any new tactics? I think not, for Napoleon considered nearly a century ago that what might be done with cavalry armed with good carbines and accompanied by horse artillery "was incalculable." The new armament develops and widens this particular part of the cavalry *rôle*; it is merely an evolution of methods, and nothing more. Lord Roberts issued quite recently a memorandum

with regard to cavalry. In this work the Field Marshal took certain selected examples from previous wars and, from evidently biased deductions in some cases, came to the conclusion that cavalry should rely in future more on fire than on shock action, even in a fight of cavalry against cavalry. I am curious to know what General French's opinion is on this point, for he appears to me to be as qualified as Lord Roberts to reorganise the British cavalry.

The opinion of Lord Roberts, who, so to say, never employed his cavalry in South Africa except in the ride to Kimberley, does not in any way modify my views.

What we require is a vigorous, very mobile cavalry, trained equally to fight on foot as to ride in a charge, and with as much confidence in their swords as in their carbines. But it must, above all things, be admirably mounted and be composed of good and bold riders. Given leaders of ability, and we can let them go, for they will do great things.

3. *The Bayonet.*

According to certain military writers, the bayonet is merely an emblem and should be suppressed. This opinion is entirely based on the fact that the Boers were not armed with it. Is not this one of the reasons why they never took a decided offensive, even after an undoubted victory? On the other hand, did not their dread of the British bayonets on some occasions limit the resistance of the Boers? In many of the British official reports we see this expression, "their fear of the bayonet made the enemy abandon their trenches." They feared a charge, and that accounts for it. The Turks in the redoubts on Mount Skobelev waited for the charge, and the bayonet played its part.

One can perfectly understand that the more firearms improve, the less important does the rôle of the bayonet appear. But when the enemy arrives at close quarters, it is the fear of the naked steel which decides the other side to take to flight. No actual use may have been made of the bayonet, but the sight of it has had the desired effect. We may quote instances even from this war:—

(a) During the siege of Ladysmith, the Boers on January 6th successfully attacked Caesar's camp and Wagon Hill, and every counter-attack by the British, with fire only, failed to turn them out.

"Finally, about 5 P.M., three companies of the 1st Devonshire Regiment came up to Wagon Hill, a last reinforcement sent from the northern section of the defence. They immediately received orders *to attack with the bayonet* and drive the enemy from the crest. They gained a sheltered position about 50 yards from the enemy, and, after a rapid fire, rushed boldly forward, driving the enemy *not only from the plateau but also from the lower slopes and neighbouring dongas. The Devonshires lost 28 per cent. of their strength, and had only fired 12 rounds per man*"* (*Revue Militaire des Armées Étrangères*).

* The portions in italics are extracts from General White's report.

Fire would probably have been kept up indefinitely without producing this result.

(b) On February 22nd, General Buller's troops endeavoured without success to carry the heights of Onderbrock Spruit, but they remained in possession of the lower trenches.

"During the night the enemy made a serious attack against our left. The fighting was very brisk and there were *hand to hand encounters*. Prisoners were taken and retaken, and on several occasions there were charges with the bayonet" (Official report).

(c) On January 15th a British post, two companies strong, was attacked at Slinger's Farm. After drawing their enemy's attention towards the east by fire at long ranges, the Boers suddenly made a surprise attack on the western side.

"The enemy were approaching and the moment was critical. Captain Madocks, of the Artillery, who was commanding the New Zealand Mounted Rifles, saw the critical situation of the Yorkshires, who had lost their commanding officer. He quickly assembled some of these men on the western side of the summit and rallied the troops which were occupying it. He encouraged them to man the entrenchments and to oppose the enemy who were very bold in attacking. Many of our men in fact had abandoned their posts. Captain Madocks then rushed forward, ordered the men to fix bayonets, and charged along the slopes. The Boers immediately turned about and ran as far as the bottom of the hill. Their example was followed by all who were hiding and taking cover behind the rocks" (General French's report).

The bayonet was not actually used, but it intimidated the enemy. Theorists may maintain that the charge could have been stopped by fire; it certainly could have been, but it was not, because the soldier who is frightened runs away, however perfect a weapon his rifle may be.

If it had not been for its bayonets and the resolution of its leader, the British detachment would have been lost in spite of the fire of its rifles, because the men themselves could not fire steadily any longer. The bayonet saved them, and then people say that it is merely an emblem. This is pure theory and one that does not take men's nerves into consideration.

Let us jealously keep our bayonet, and let us inspire all ranks with the confidence in it which it deserves. Let all who march to the attack long for the assault and the final decision with the point of the bayonet. Then, whether the assault takes place or not, the bayonet will have done its work.

B.—THE CONSEQUENCES OF THE FALSE LESSONS DRAWN FROM THE ANGLO-BOER WAR.

1. *The Tactics of the Three Arms (General K——*)*.

The principle of the inviolability of the front leads naturally to the conclusion that there is no other way of fighting except by

* "Tactique des Trois Armes," by Général Kessler. 1902. (General Staff.)

enveloping tactics. Accordingly, General K——, whose great personal merits and high military attainments deserve our entire esteem, starts with this initial error and arrives at the following conception of war :—

(a) *The Independent Division.*—“The rôle of the advanced guard.” When an enemy is in position, the advanced guard will approach as near as possible, will avoid engaging, and will *take up a position* so as to enable the main body to concentrate.” If the enemy is on the march, “the advanced guard halts in time to *take up a position* on ground of its own choosing, so as to give the main body time to assemble.”

The inaction of the advanced guard is justified as follows :—

“On the other hand, if the advanced guard begins an action, it will have to go on with it. Its infantry, which advances with great difficulty and using what cover there is, *cannot withdraw* when once it has engaged the enemy at medium ranges. Its freedom of manœuvre is lost and it is rigidly fixed to the ground which it has gained: if it is entangled in the fight, it must continue it, whatever the cost may be. An engagement brought on by the advanced guard must necessarily result in the intervention of the main body.”

But all this is contrary to reality. The greater the distance at which the fire-fight is carried out, the less does the infantry become entangled. Had the British advanced guards the least difficulty in breaking off the fight and retiring, at Lombard's Kop, Willow Grange, and in other instances? Were the affairs of Colenso, Taba Myama, &c., anything else except advanced guard actions, not pushed home, in which there was no difficulty in breaking off the fight? This is precisely the effect that the great range of modern arms has produced, that an engagement can more easily be broken off, whether by the artillery or by the infantry. Nearly all the actions of the South African war show this. Did De Wet when operating around Paardeburg have any difficulty in breaking off the fight?

The engagement of the advanced guard is the only means of *knowing* anything. If it is halted, all one has to go on is the very uncertain information gained by the cavalry, and this becomes more and more vague as firearms improve.

General K —— moreover recognised this himself. “It is only in the course of the engagement that *approximate ideas* can be formed of the enemy's forces opposed to one.”

Assembly and deployment.—When the advanced guard has taken up its position in front of the enemy, of whom nothing is known regarding his force and dispositions, the division completes its assembly formations. It may even be uncertain that the enemy is really in front of it, for a screen of a few rifles is sufficient to check the cavalry.

“If the general situation requires the offensive, the general commanding the division *chooses his point* of attack, which will be preferably one flank of the enemy's line. He selects the position

for the main body of the artillery as well as its targets; he also decides on the positions of assembly for the larger infantry units and gives them their general lines of attack, so that all their efforts may converge against the desired point."

In this way, without absolutely any knowledge of the enemy, the plan of operations is decided on and the point of attack chosen. These dispositions are made "about $2\frac{1}{2}$ miles" from the enemy, who may not perhaps be where he is supposed to be.

The assembly is really a deployment. "The whole of the division *will be extended* on a single line which will envelop a part of the enemy's position . . . in such a way that the wings of the assembly formation may be as close as possible to the enemy."

"By giving the front of the troops in their position of assembly an enveloping formation, the batteries of the advanced guard and those of the main body will be able to cross their fire up to a distance of about $2\frac{1}{2}$ miles from the point chosen for the attack. The front of the general assembly of the troops may, therefore, be increased by $2\frac{1}{2}$ miles, and will consequently be enlarged from $1\frac{1}{4}$ to $3\frac{3}{4}$ miles. This front will decrease from the nature of things as the troops advance against the defensive position." So a concentric advance is made, with the whole of the troops deployed and with no reserves, the object being to arrive near the enemy on a front of about $1\frac{1}{4}$ miles.

Nevertheless there must be a cause to determine the choice of the point of attack.

"It follows then that the choice of the lines of attack will more often depend on the *configuration of the ground* than on the enemy's dispositions." This means that the enemy counts for little, and it is the ground which is to be attacked.

The author admits that initial dispersion and a deployment over an enormous front "evidently presents certain dangers." As a matter of fact, there is great risk of an active enemy, who can manœuvre, concentrating his force against a wing or a portion of the front, especially if the ground which the attack has to traverse, is divided into independent sections by wooded heights, for example, or by mere obstacles to view, like the crest of a hill.

"The fight accordingly is carried out on the lines laid down by the general commanding the division in his initial instructions. These instructions are based on the general situation, and are issued after a careful study of the ground. Their main lines must be followed, because it is impossible to modify the general character of the manœuvre by *an order* given while the fighting is going on. Particular incidents may happen while the combat is raging, but only the commanders in the first line can take advantage of them or repair their consequences. *The general commanding the division* can do nothing and will not have the time to personally interfere. He will be constantly occupied in seeing that the various efforts converge and that they maintain their directions." This is command in a negative sense, an

absolute abdication of it. Is not this sufficient to condemn the system?

(b) *The Army*.—"We have dealt in a previous chapter with the action of an independent division. The arguments which are employed in favour of extended fronts apply to the army as well as to the division; it is by an enveloping attack that an army must strive for success . . ." "In order that all the corps of an army may make a converging effort against the enemy, and at the same time get the maximum development of fire along their line, it is necessary that the march should be made in columns *on a sufficiently extended front* to render possible the envelopment of the zone in which the enemy is manœuvring."

The envelopment becomes the one and only plan. The army advances on a wide front regardless of the danger to which it may expose itself from an enemy of any manœuvring capacity, and forfeits of its own accord all possibility of manœuvring itself. There is, however, a corrective measure which we must make it our duty to point out.

"If the enemy's situation is known exactly, which will very rarely be the case, the army will march on a wide front with all its corps in line, by which method the envelopment of one flank will be facilitated.

"If the situation is uncertain an advanced guard will be formed by one of the corps, with a cavalry division to reconnoitre its front; the remaining corps will march on a front wide enough to admit of their assembly towards one flank or the other" (we must remember that the assembly is nothing else than a deployment). "A strong reserve is necessary in this case *to guard against unforeseen events and surprises*, which are the possible outcome of the uncertainty of the situation. This reserve will ordinarily be formed by an army corps marching in the second line."

At last we have got to the idea of a general reserve; but, in the author's opinion, this reserve will be expended as soon as contact has been gained and the general decides to fight. We shall confirm this later on and return to the abdication of command.

"The personal influence of the officer in supreme command in the conduct of operations is chiefly shown during the period which precedes the engagement. The will of the Commander-in-Chief is evidenced in moving army corps and in directing their marches, so that the concentration of the army may take place in the required position.

"But when once the engagement has commenced on battle fronts that are some 20 miles long at the opening stages, . . . the commander of an army has no longer that determining influence over general events in the fight, which he had formerly when fronts were less extended. He must, therefore, limit his action to seeing that his instructions for the conduct of operations are carried out."

Why does the commander abdicate? Because he has no reserves.

"To sum up, whether an army is acting on the offensive or on the defensive, one of the chief elements of success is superior

dispositions, or superior preparatory manœuvres. These are the business of the Commander-in-Chief. The conduct of the fight is *in the hands of the army corps commanders*, and the commander of the army can only exercise his intervention to a limited extent, because *he has at his disposal only one body of troops*, the cavalry division. He has under his direct orders neither battalions nor batteries, from which to form a special corps in reserve."

This is quite clear, the army has no reserves. It appears that the army corps commanders are the sole proprietors of their troops, and that the army commander has not the right to take any of them to form a reserve. If there are no reserves, there is no commander.

The only reserve which the general appears to have a right to form is a mass of batteries, that is to say a reserve formed from the arm which is the very last to be utilised in this way.

"An army-artillery is the real reserve of the commander of a group of armies."

It is clear then that the battle, for the army as well as for the division, is to be in linear formations, exposed to whatever fortune may await it in front, and without any possible intervention by the commander.

The desideratum is an enveloping movement by means of an enormous extension of front; the result is a mere preparatory combat which can have no decisive effect. It is a copy pure and simple of what Lord Roberts did, but he was aware of the conditions with which he was dealing; these were, an enemy very inferior numerically, incapable of attacking, and with shaken morale, and a country without an obstacle, where all the columns could see each other and render each other support. We shall see later that Lord Roberts is very far from considering the system which he adopted to be the normal mode of fighting.

We may ask what would be the result of a battle between two adversaries, of equal forces and imbued with the same ideas, the sole object of each being to envelope the opposite side. Should we see the line of battle indefinitely extended like a thread of elastic? Care must be taken, for elastic breaks very easily if it is stretched too much; and this is what will happen if there is the least effort on the part of an adversary who will fall upon the centre, pierce it, and reach the vital organs of the army on the other side. These spider webs, these so-called inviolable fronts, will be openly violated by the man who knows how to collect his forces and push home an attack with the firm determination to succeed.

I do not mean to say that envelopment is not a very advantageous form for the attack to adopt; it cannot, however, always be realised. It is a scheme, and I object to all schemes on principle.

The difficulties of envelopment increase in proportion to the strength of the forces engaged; an *army* easily protects its wings. It is clear that it would be to the interest of two small detachments, two divisions, two army corps even, operating against each other without restriction as to space, to manœuvre with a view to envelopment if possible. This does not hold good for armies. It

would be desirable if units forming part of imaginary larger forces more often found a place in our tactical schemes. The exercises would be more instructive for the troops, and we should not have commanders of sides, often officers of junior rank, dealing only with questions of strategy.

I have thought it necessary to discuss the "Tactics of the Three Arms" by General K — at some little length, because the ideas he has put forward have already profoundly impressed officers; but the truth is, many have been seduced entirely by the last chapter, in which the General has revealed with remarkable eloquence his true feeling as a soldier; this has fascinated them and masked the errors in doctrine of the previous chapters.

2. *German Tendencies from an Article in the "Revue des Deux Mondes."*

In the first article, the writer, whose anonymity hides one of the most distinguished personages in the French army, tries to trace German tendencies by means of a study of our neighbour's autumn manœuvres. They rest on the basis that promptitude of action is one of the chief elements of success, and they are again summed up in the principle of envelopment. "It is the only means of gaining superiority of fire, so the generals say." This postulate seems arbitrary, but we will pass it over.

"The principle leads to an extension of the front in order to make envelopment the main factor of the attack. Also, since 1898, the German generals extend considerably before the battle, instead of closing in and concentrating as the majority of European armies do."

This operation in the presence of the enemy offers no danger, because "it is well known how difficult it is to deliver a counter-attack from a position occupied with a view to the defensive." Nothing, however, permits one to suppose that the enemy will start on the defensive, for this means depriving himself of the advantages of manœuvre.

We will not, however, return to the dangers of an exaggerated extension of front.

At the autumn manœuvres of 1898, General von Plessen was ordered to take up a given defensive position and was not allowed to manœuvre. In such conditions, and with great numerical superiority, the success of the enveloping movement was easy. According to the German manœuvres, the characteristics of the battle would appear to be as follows.

For the infantry:

"A dense line of skirmishers from the opening of the action.

"A complete absence of either local or general reserves, whether for the battalion, the regiment, or the division."

"The assault made by thick lines of skirmishers, without supports or reserves, after an energetic fire preparation.

For the artillery :

As there is no longer any corps artillery, the whole of the artillery is divided between the divisions and acts in close concert with the infantry (this is perfect) and "it gives a remarkably vigorous impulse to the offensive of the divisions."

"There is nothing corresponding to the idea of a decisive attack made by a "block" of infantry, previously held in reserve for this purpose, and launched against one point in the battlefield."

In other words, there is a parallel battle in all its horror if the enemy does not allow himself to be enveloped; a battle of divisions acting independently; a purely frontal combat carried out with all due tactical skill and energy, but none the less entirely in the hands of the subordinate commanders.

So far the conception of the German battle, as given by the anonymous author, is the same as the one we have previously dealt with. His good sense and experience as a soldier refuse, however, to admit the conception of a battle without reserves, and without any deciding blow. Speaking of the Germans, he says: "Do they really abandon the employment of reserves, or are their new tactics not another way of understanding how to use them."

Then follows what might be the *German* idea of employing the reserve—and not the author's, as may erroneously have been concluded.

"In accordance with what has gone before, a German army of three or four army corps would put one corps in the first line, which would be ordered to attack with its 32 battalions simultaneously and in their entirety. . .

"This first échelon of the German army will fight a desperate battle with every available means it has, engaging them to the last man and the last gun. It will produce the maximum effect of which it is capable on the enemy.

"This effect will be according to circumstances; but it will have, in any case, the result of vigorously holding the enemy, and of forcing him to bring up his reserves to the front and of immobilising them. It is improbable that the assailants will beat the enemy, but they will leave him more or less demoralised by their violent attack. When the first effort is ended, there will be a pause in the battle.

"Then the second échelon will come up, which till now has been kept entirely out of action, with the men resting and getting their food. It will either go through the remnants of the first échelon, or act in another portion of the front or on a flank. It will continue the tactics of the first échelon but with entirely fresh troops."

"The other army corps will, one after another, continue the combat in the same way," and we hope, at least for the sake of the future enemies of Germany, that all the corps will fight successively and be crushed at the same point. In this way, in the central section at the third battle of Plevna, were the successive waves, which were sent forward too far behind one another, defeated and crushed. In this way also, were the successive British battalions defeated

and crushed, which were engaged independently, first on the heights of Taba Myama, then on Spion Kop, and so on.

"However the case may be, these attacks by successive *waves* form a very different mode of fighting from that usually contemplated."

It is really to be hoped, for the sake of their future enemies, that the Germans will persist in this conception of the battle, assuming, that is, that they have any such conception. But we know that they study history carefully and have a thorough knowledge of our literature, and I am afraid that, before adopting the doctrine which has just been fostered on them, they may remember the fight between the Horatii and the Curiatii and may also read La Fontaine's fable again, entitled "*Le Vieillard et ses Enfants.*"

The author then proceeds to explain the great differences between the German tactics as thus defined, and the tactics of the Russian army. For the latter's regulations insist, quite to the contrary, on the necessity for strong local reserves and a strong general reserve; they also describe the decisive attack, as evolved from the experience of 1877-78, that is from the experiences of the last European war. As the Russians and not the Germans were the principal actors in this war, it would appear more profitable for us to study the question from the Russian view, and their principles are the same as those contained in our decree on "*The Duties of the Army in the Field.*"

We shall see further on how Lord Roberts, from his experience in the South African war, reverts to our ideas.

3. *British Tendencies, from an Article in the "Revue des Deux Mondes."*

A second article in the *Revue des Deux Mondes* describes in the clearest and most comprehensive manner the tactics employed by Lord Roberts in South Africa. It goes on to show that "the experience so dearly bought, has developed a current of ideas in the British army on which the majority of its officers are agreed."

The chief of these ideas is the following:—

"The war of masses of the beginning of the nineteenth century, which is held in honour at present by most of the European armies, will be replaced by a war of screens and operations of numerous mixed columns."

With this premise British officers would arrive at the same notion of war as General K —, namely, a battle on an extended front with the idea of envelopment; no reserves, and consequently no decisive result at one point. This is very natural as a first impression for an army whose commander-in-chief has just employed such methods with success. Lord Roberts himself will take care to put them right, and, if he is listened to and understood by his subordinates, they, too, without doubt, will renounce their belief in a war of screens.

In reality two opposing screens will only produce local actions without any serious result. The property of screens is to tear easily, and in each one of them there will be holes which the local reserves will be sufficient to close. But after that, there will be nothing further and no decisive effect, unless a small rent once begun is enlarged by a powerful force, which will push on and end by threatening the adversary's vital organs, or his line of retreat, or break up his reserves, and in short force him to confess himself beaten and take to flight.

The war of screens is merely the first act in the engagement. It represents the preparatory combat, and I think that everyone agrees what the characteristics of the latter should be: a relatively extended front, deliberation, prudence, and at the same time the utmost vigour. ("The mission of the infantry is severe and laborious." Article 129, "Duties of the Army in the Field.") But the more fronts are extended—and it is certain that the constant progress in armament does tend to increase them—the greater necessity will there be to try for a definite decision; and this a combat between screens will hardly ever effect.

In former times battles were fought on a restricted front which the eye could take in from one end to the other, and a serious misfortune or a defection or rout in one part of the battle-front brought about the flight of the whole. With armies on their present front, the various fortunes of the fight, successes or failures produced either on one side or the other in different parts of the battle, escape the notice of the majority of the actors and their results are only local. More than ever, therefore, is it necessary to destroy the general equilibrium by a definite success in a particular zone.* More than ever is it necessary to make up one's mind for a decisive effort. The argument has all the greater force, because this effort can now be realised if a determined commander will collect in the given zone those superior means which, as we are aware, will give him superiority of fire against the point he wishes.

Having got superiority of fire, "there remains nothing to do except go straight forward."

The author of the articles in the *Revue des Deux Mondes* explains what appears to be the evolution of tactics in Germany and in England, but he does not explain what his own ideas are on the employment of reserves, to give "the great blow," "the blow of the fist," or to produce the "événement." It is quite certain that his conception is not one of a battle without reserves; this his first article shows quite clearly. He protests, it is true, against *attacks termed decisive made in dense masses*; but I have shown at the end of Part II that this was due only to a question of words, and to a mere difference of opinion as to the meaning of certain expressions which are in use.

* We may remark here that this zone represents approximately a battle front in former times: for the zone was 1,600 yards about at Saint Privat, and 1,100 yards at Plevna.

4. *The Strategical Offensive and the Tactical Defensive.*

One might think that the idea presented under the magic formula "the tactical defensive and the strategical offensive" was suggested after a profound study of facts from South Africa. It was, however, nothing of the sort; for we find the idea expressed for the first time in a letter from Port Elizabeth, dated December 15th, 1899, when the first news of the disasters at Magersfontein and Stormberg had been received, but without any details, and on the day on which the battle of Colenso was fought. The idea, therefore, was preconceived and the minds in which it was crystalised very naturally only recognised those facts of the campaign which corroborated their theory. They were hypnotised beforehand by the conviction of the inviolability of the front, and the conception which they arrived at was as follows:—

[The portions of the text in inverted commas are extracts from a document emanating from one of the promoters of the formula.]

The consequences which result from the present power of the rifle are, "the impossibility of making a frontal attack even with superior forces, and the certainty of seeing the attack fail if it is attempted." This is the foundation on which everything is going to be built; it rests on nothing, and the whole edifice will crumble away in consequence.

The engagement at first will take the form of a series of local attacks, which may succeed when they are directed against salients which can be enveloped. But the promoter of the idea agrees that this combat—which is only the initial stage of our preparatory combat—will only give local results.

"But it must be distinctly understood that there can only be a sort of local infiltration, which can merely drive back a smaller or larger portion of the enemy's front, attract or immobilise his reserves and deprive him of certain positions; but it can never be counted on to break his line."

Gradually the defence will end in the form of a *straight line* without salients, and as envelopment is the only means of obtaining superiority of fire, the defence becomes unassailable.

"A straight line cannot be invested and all the methods of procedure in siege operations fail against a front whose continual tendency is to become rectilinear and refuses to allow itself to be enveloped," and the battle "will go on eternally without result."

There is then nothing to be done? Now we come to the substitute for Napoleonic tactics.

"The improvements in modern armament favour the adversary who takes up a position and lies in wait...." Therefore the doctrine is to have oneself attacked. This is evidently an excellent idea, and it succeeded perfectly with Cronje in front of Lord Methuen; but when Lord Roberts arrived, Cronje was no longer attacked. The partisans of the system do not say how we are to compel the enemy to attack us.

A great battle is accepted on the defensive—which the enemy perhaps will not offer us—in this “each success obtained by the enemy will entail on his part the bringing forward of fresh troops. On the other hand, when we drive back a part of the adversary’s line, we shall content ourselves with pursuing him with our fire, and will not engage our reserves.”

That is to say, we shall waste the enemy without wasting ourselves. Therefore little by little, “as is quite obvious,” the greater part of the enemy “will, be closed up opposing this well defended front.”

Then the critical event takes place, the decisive manœuvre with the strategical reserve. But we must not think that the manœuvre will consist in seeking the enemy, for nowadays “the tactical attack,” which was “the crowning effort of Napoleon’s methods. . . will almost certainly be paralysed by the power of modern arms . . . ; the attack on a flank, even when unexpected, has henceforth no more chance of success than the frontal attack ; at any rate against an enemy who has troops in reserve which modern arms will allow him time to employ.”

The strategic counter-attack will neither be used to envelop a flank nor to make a counter-attack, for manœuvres of this nature “will have to deal with troops in fighting formation, that is to say, with troops ready to use their weapons. . . . All these manœuvres will end in a tactical offensive and we have shown all the dangers and all the hazards of this operation.”

What then is this magnificent reserve going to do ? It is going to be moved to some point, “the possession of which the enemy cannot afford to abandon to us.” Moreover, this important point must not be guarded by the enemy’s troops, or we should still have to fight for it. The decisive blow will be struck in empty space, “in the parts which are denuded of troops.” The idea is quite clear ; and in this way we shall break up “the moral of the enemy’s leaders, especially that of his commander,” and victory will be gained without fighting, without danger, and without effort.

It is with doctrines like these, often cleverly presented that people trouble the minds of our officers and destroy their confidence in their regulations, in their leaders, and in their men ; in this way they deprive them of that vigorous spirit without which victory never has been, and never will be, obtained.

With what relief we come back, after such lucubrations, to the principles of Napoleon :—

In strategy, seek for the battle.

In tactics, feel the enemy everywhere and break him at one point : that is to say, to the principles of the doctrine of our regulations.

C. THE TACTICS OF LORD ROBERTS AFTER THE WAR.

Shortly after the war Lord Roberts had a manual of combined training issued under his signature. The manual contains the

lessons drawn by the Field-Marshal from his own experiences, and, as far as the two principal phases of the battle are concerned, they are in conformity with the conclusions which I have enunciated in the previous pages.

1. *The Defensive and Offensive.*

The portions between inverted commas are extracts from the manual.*

"It may be concluded, that the defensive has gained in power of *resistance*, but has lost in the power of inflicting a decisive check; that the offensive has gained in *facility of manœuvring*, but has lost in the *facility of acquiring information*; and it is conceivable in these conditions, that it may be to the advantage of the defender to await the attack, and to the advantage of the assailant to manœuvre the defender out of the position. But such tactics, although at the moment they may spare life, may in the long run be more costly and less effective than more vigorous methods; and in order to bring a campaign to an end in as short a time as possible, every general engagement should have for its object *a decisive victory*."

The Field-Marshal, when he wrote these lines, must probably have come to the conclusion that if one great battle had been fought at the beginning of the campaign, and losses not spared, it would have cost England far less both in men and money than the three years of war, for which the want of vigorous action at the outset was responsible. Napoleon always tried to bring on *the battle*, and the British army would have done well if it had followed his principle.

Lord Roberts has learnt from experience on what general lines progress has been made; the offensive has greater difficulty in gaining contact but greater facility of manœuvring, consequently it has gained power in concentrating its forces against a desired point.

2. *The Offensive.*

(a) *Distribution*.—The manual issued by the Commander-in-Chief of the British army clearly defines the two separate phases of the battle, as indicated by our regulations:—

"The objective will be that point which the commander intends to assault and occupy. . . . The objective will generally be the most vulnerable point; and against this point the main, or decisive, attack will be directed, while a secondary attack holds the enemy to his ground elsewhere.

"Whether the holding attack is to be pressed home depends on circumstances. As a rule, in order to carry out their object, and prevent the enemy from thinning his line to strengthen the vulnerable point, it will be necessary for the troops making the holding attack to act with great vigour.

* The edition of 1902 is referred to.—[TNAHS.]

"The main principle to be followed in distributing troops for attack is the concentration of superior force against the point where it is intended to carry the enemy's position. . . . The force detailed for the main attack should, therefore, be as strong as possible, while that detailed for the holding attack should not include a single man or gun more than is absolutely necessary."

Here then are clearly the two phases: a secondary attack, or preparation with the minimum numerical strength but carried out with the utmost vigour (Article 129 of the "Duties of the Army in the Field"), and the principal or decisive attack delivered with the greatest strength possible (Article 130).

"The infantry on whom the brunt of the attack must fall, will be formed in greater strength, and consequently in greater depth, opposite the point where it is intended to break the enemy's line."

The attack is carried out with as many men as possible, that is to say, in *mass* and with *depth*. This is exactly my opinion.

"A commander can only exercise a direct influence on his command so long as he retains at his disposal a portion of his force with which to meet the varying contingencies of an engagement. . . . Every reserve should be as strong as possible."

This is obviously the same criticism of Sir Redvers Buller's and Lord Methuen's operations as that which I have already made. A commander can only use his power by means of his reserves. If he has no reserves, he abdicates the command. A more complete agreement with our "Duties of the Army in the Field" could not be found.

(b) *Superiority of Fire*.—"All movements on the battlefield have but one end in view, the development of fire in greater volume and more effectively directed than that of the opposing force; and although the bayonet still plays an important part, it is superiority of fire that decides the conflict."

Further on, speaking of the main attack:—

"The condition is the concentration of superior force at the decisive point."

We next come to co-operation between the arms:—

"The advance of an attacking force should always be covered by the fire of other troops, infantry as well as artillery."

"At the crisis of the conflict quick-firing artillery is especially effective. On troops whose power of resistance is already strained to the utmost, and on troops in retreat, a constant hail of shells cannot fail to be demoralising."

"Artillery fire should be continued against the position until the attacking infantry is close to it. Even then fire should not be stopped, but should be directed over the position and continued during the infantry assault."

Lord Roberts lays down what I have insisted on, namely, that superiority of fire at the decisive point should be sought by the accumulation of force and by the co-operation of the two arms, infantry and artillery, the latter firing till the last moment.

Given the necessity, which is now more absolute than ever, of obtaining superiority of fire and of combining the arms, we will see what ground is most favourable for the decisive attack or for the decisive counter-attack:—

“The most favourable lines of attack are those where the ground favours the co-operation of the three arms, and especially where the advance of the attacking troops can be effectively covered by artillery and long-range infantry fire.”

In the same way Lord Roberts indicates that one of the chief requisites of a defensive position is, that there should be “favourable ground on which all arms can co-operate for the decisive counter-attack.”

The ground most favourable to the decisive attack is that which is open and permits troops to manœuvre and act, and not close ground where infantry, if left to itself, can only progress slowly, and from which it cannot debouch. The following are examples of ground for the decisive attack:—

At Sadowa, the bare ground between Chlum and Nedelitz, and not the roads leading from the Swipwald or from the Holawald.

At Woerth, the Morsbronn and Albrechtshauserhof.

At Metz, the glacis of Saint-Privat.

On ground like the above troops can work together.

(c) *The Preparatory Combat*.—“A proper preparation of the attack by the artillery is the first step towards attaining superiority of fire. This means, firstly, that the enemy’s guns should be silenced, and, secondly, that his position, particularly at the point or points where the attack is to be driven home, should be so effectively bombarded, from both front and flank, that the defending infantry are unable to maintain an accurate fire.”

We see then, that as our regulations direct, superiority of artillery fire is the first object; but this does not mean that the guns will produce their effect by a mere bombardment.

“In this preparation, the attacking infantry will always be called upon to take part, for the defenders, if there is no fear of their position being rushed, will be careful not to expose themselves, and the attacking artillery will produce no effect.

“As a rule, then, the first task of the attacking infantry will be to enable the artillery to find a target.”

If the lessons of Plevna taught the British military authorities nothing, the more painful and personal experiences of the last war have at length opened their eyes.

“Everything will make the fight for each locality long and exhausting; and it will, as a rule, be necessary for the troops to secure and fortify one point of vantage before they attack the next. . . . Buildings wrested from the enemy, lying within the zone of long-range fire, should, when suitable and well situated for the purpose, be hastily fortified to serve as rallying points. Entrenching tools, therefore, and, if possible, parties of engineers, should always be within reach of troops attacking.”

These were Skobeleff's principles which I deduced when I discussed the Russo-Turkish war; each position, as it is captured, must be strongly organised for defence.

"The ground for 1,000 yards in front of a line of infantry, provided that the men are *steady enough to take careful aim*,* and the ground is favourable, is so closely swept by a sheet of lead as to be well-nigh impossible to troops in any other formation than lines of skirmishers extended at wide intervals."

This is the principle of the employment of swarms of skirmishers during the preparatory combat, a formation which is daily becoming more common in our infantry.

"When it is considered that the fire of the defence is sufficiently weakened, the advance will be resumed, and the leading units, covered by the fire of both infantry and artillery, will fight their way up to decisive range."

"The best type of an offensive battle is a methodical progression from point to point, each successive capture and advance weakening the enemy's hold on his main position and paving the way for the last decisive forward movement; each successive advance being deliberately prepared and systematically carried out."

In these lines we find the main features of our frontal attack: prudence, deliberation and vigour, which *prepare* the decisive rush, the decisive attack.

(d) *The Decisive Attack*.—Envelopment is recommended in preference to a frontal attack.

"It is to be recognised, however, that this is not an absolute rule, and that some portion of the front, especially if the enemy's attention and his reserves are drawn off by attacks elsewhere, or if his front is too extended, may be a more promising objective." This is a distinct blow at "enveloping screens."

The advance to the attack is described in the following terms, under the heading of "the assault."

"While the troops told off to develop the attack are engaged in the struggle for superiority of fire, and have probably become wholly absorbed in the firing line, the remainder of the attacking force, with the exception of some *portion* of the general reserve, will come up in rear of those points which have been selected for assault, and which are to be *carried*, cost what it may. The critical moment has now come. The artillery pours in the most rapid fire, and orders are given for the final advance of the infantry. Strong reinforcements are thrown in, and, as they reach the firing line, *carry it with them*, and *pressing* forward with the utmost vigour and resolution, *regardless of losses*, rush the position."

Is not this the exact reproduction of our decisive attack? The general reserve, as strong as possible, delivers the attack and the advance is made by successive reinforcements which *carry* the firing line with it; in other words, this is done by a series of impulses, just as I have pointed out was the case at the

* It will probably be more difficult for European troops to attain to these conditions, as they are not the marksmen the Boers were.

third battle of Plevna, and as our regulations lay down. This is Lord Roberts' experience and it is one gained from war: a decisive attack with superiority of fire and with plenty of men; that means, the less the superiority, the greater must the living energy be. (For example, the Boers at Spion Kop.)

3. *The Defensive.*

(a) *Depth*.—Lord [Roberts] very rightly criticises the occupation of positions which are too advanced to permit of their being supported.

"As a general rule, advanced posts which are too far to the front to be supported by effective infantry fire from the main position had better be left ungarrisoned."

He admits, however, the principle of occupying them "in order to deny them to the enemy, or to command ground which would otherwise be dead." In this case, "the danger which their occupation entails may be reduced by the free use of earthworks and obstacles, by arrangements for flanking them by fire and by the construction of strong entrenchments as a *second line in rear*." The Field-Marshal, it would appear, thoroughly recognises the utility of covering detachments. "The enemy may be *deceived*, and his *reconnoitring parties embarrassed*, by means of detached parties, preferably of mounted troops, sent out to occupy temporary positions, either in front or beyond the flanks of the entrenchments. If these detachments are well handled it may be very *difficult for the hostile patrols* to ascertain the exact locality or the extent of the battle-position; and their commander may be induced to fatigue his troops by an attack on ground held by a mere *screen*, or to extend his line unduly in an attempt to envelop a *false flank*. On suitable ground, artillery may often be advantageously employed for this purpose."

The last sentence sanctions the employment of an advanced line of artillery.

Lord Roberts does not appear to have carried the idea of depth any further; that is to say, the idea that the occupation of a position is a temporary move, which must not preclude manœuvre. (See end of Part V.)

(b) *Distribution*.—The dominant idea of the new British regulations is that the defence should always be ready to employ the decisive counter-attack. The initial distribution of the troops is made with this idea in view.

There is no question of employing the reserves in promenading "the parts which are denuded of troops."

The one idea of the defence is the counter-attack: local counter-attacks and the decisive counter-attack.

"The distribution of the troops of a force acting on the defensive should be as follows:—

"Firing line.

"Supports (if necessary).

“Local reserves { For the support of the firing-line and for local counter-attacks.
 For the protection of the flanks.
 . General reserve.—For the decisive counter-attack.”

(c) *Local Counter-attacks*.—“The local reserve of each section has the duty of delivering local counter-attacks, as it is advisable that these should be delivered by fresh troops rather than by the firing-line.”

“In such cases, the sooner the counter-attack is delivered the better, so that the enemy may have no opportunity of strengthening the ground he has gained.”

“Directly the enemy’s firing-line falls back, the troops should be reformed as rapidly as possible and disengage if practicable.”

The Decisive Counter-attack.—“The troops will be divided into two main portions, one for the defence of the entrenchments, the other, the general reserve, for the delivery of the decisive counter-attack. In determining the relative strength of these two bodies, it should be borne in mind that the *stronger the general reserve*, the greater the chances of success.”

“The decisive counter-attack will generally be delivered against the enemy’s flanks, and in such a direction as to threaten his line of retreat, although opportunities of breaking the centre may occur. The counter-attack should come, if possible, in the form of a surprise. It should be carried through with the utmost vigour and resolution, and all ranks should understand that they must press forward until the last reserve has been thrown in.”

Lord Roberts in this way gives his local or decisive counter-attack the form of the *brusque attack*, as described in Part II, B. 4. He employs his troops, if need be, to the very last man, like Skobelev and like Dragomiroff.

We see from the above that the teachings of the last war lead the Commander-in-Chief to expound the self-same principles as those contained in our “Duties of the Army in the Field.”

It was simply to their having misunderstood these principles, and to their not having adapted their methods to the general laws of the evolution of tactics, which should have been foreseen and enunciated, that the British owed their defeats.

To any one who has studied and thought over it, the South African war will mean the verification of the principles which are contained in our regulations, especially of those which deal with the two principal phases of the battle, the preparatory combat and the decisive attack; and it is the latter that some people have prematurely tried to demolish.

4. *Gaining Contact.*

There is only one point in the British regulations which surprises me. Lord Roberts states that modern fire-arms increase the difficulties of gaining contact and allow the defence to manœuvre in depth, but he does not conclude from this how necessary it is to

modify and increase the means by which contact may be gained. And yet the logical conclusion is, that for any new function there must be a corresponding new organism.

Lord Roberts, on the contrary, merely sees in his advanced guard an organ for security, and, copying the German idea, prescribes a different action for it according to whether the enemy opposes a screen or occupies a defensive position, that is, according to whether the enemy is stronger or weaker. But how can the advanced guard tell this without engaging? With a system of investigation like this, that is, without fighting, the field-glass stage will be indefinitely prolonged, the fog of war will never be cleared, and there will be considerable risk of a blind engagement.

The more difficult it is to gain contact, the stronger should be the means for gaining it; this seems to me to be an axiom, if not a platitude.

D.—CERTAIN TECHNICAL LESSONS TO BE DRAWN FROM THE ANGLO-BOER WAR.

1. *Guns for High-Angle Fire.*

The enormous losses of the Russians in the battles around Plevna led to efforts being made to discover a weapon which would be capable of sweeping the ground occupied by the enemy at long ranges, without risk and danger to itself. This was the origin of guns with high-angle fire (or howitzers), for use in the field; the idea being first conceived in Russia and then followed by most of the other countries.

The object is to dislodge the occupants of field works by means of shrapnel fired at considerable angles with a small muzzle velocity and, in consequence, with a plunging fire. When the discussion on the subject first arose, I expressed very serious doubts as to the possible efficacy of this kind of fire, for the following reasons:—

Plunging fire requires great accuracy, and so the number of rounds which will take effect will be very small, especially against a not very visible adversary; consequently the consumption of ammunition will be very great.

The second reason is that there will be very little result:—

- (1) Because the bullets, which have a small remaining velocity, will be stopped by the slightest cover; for example, by a thin layer of earth over a few planks.
- (2) Because, if the trenches are of a certain depth, even if they are not covered in, a man seated on the banquette will escape the burst almost entirely. This kind of fire is also of very little use against an embrasure with a high bonnette on either side.

When we come to actual facts we find that the British howitzers produced practically no results. For example, the howitzers which General Warren brought up to shell the heights of Taba Myama

had no effect; and the terrible bombardment of Paardeburg was attended with the most meagre results, although it was directed against entrenchments which had been hastily dug and were for the most part very visible. I am not surprised at this.

Once again I say that artillery in the field should search for the troops of the defence and not the obstacle; but it can only do this when the former are menaced by an attack and uncover themselves to be able to fire. Then shrapnel fired by field guns will do more damage than that fired by howitzers.

2. Heavy Artillery.

The spirit of self-preservation which gives rise to the wish to destroy the enemy without exposing oneself to his fire in return, was responsible for the introduction into the field army of heavy artillery firing up to 9,000 yards, large shell filled with lyddite. The British hoped by these means to sweep the kopjes and put their enemy to flight, quite forgetting Ardant du Picq's axiom that "moral effect is very transient."

When we come to results the guns did not come up to expectations. The Boers were surprised at first by the formidable explosions of this new weapon; but they quickly recovered themselves. We find two instances in which the heavy lyddite shells produced demoralising effects, but the British did not benefit much by them. But these cases were quite exceptional; according to De Wet, the following were the results at Magersfontein when the British employed lyddite shells for the first time:—

"In the meanwhile the British, who dared not attack our positions, shelled us from a long way off with their huge guns firing lyddite. In one day 436 of these shells fell among us. This bombardment only caused the loss of three men, one killed and two wounded. How was it that we suffered so little from this continuous and well carried out bombardment? I still ask it, now that I recall the accuracy with which the British judged the ranges and sent the majority of their shell into the middle of our lines."

And what was the result of the bombardment? Merely increased confidence among the Boers. "This bombardment showed us clearly that Lord Methuen was afraid to attack our position."

It is unwise to count on the effects of fear a long way off; when troops recognise that they are only frightened by a bogey, the effects disappear, and the men often even gain in confidence which increases their morale.

We may affirm, on the other hand, that the heavy artillery, which encumbered the columns and delayed them, were often more harmful than useful to the British, particularly in Sir Redvers Buller's march on the Upper Tugela, where rapidity of movement was the most important factor.

3. *Small Calibre Guns, or Pompoms.*

It is nearly fifteen years ago since I discussed the value of guns of small calibre as follows :—

“We have arrived at this conclusion, that artillery ought continuously to search for the defender and not the obstacle. We must now study how we can give to a common shell the properties which it lacks, *i.e.*, destructive effect against troops, and an increased zone of action. These properties will enable it to open for the infantry the required width of breach in the living obstacle which is its most dangerous enemy.

“The particular characteristic of the present common shell, which weighs about 8 kilos. (17 lbs.)* is that when it is used against troops, it has *too great a force* of action over a space which is *too limited*. Let us suppose for the sake of discussion that its mean radius of action is 16 yards. The 8 kilos. common shell covers a circle, or rather an ellipse, of about 800 square yards round its point of burst, with a number of splinters which are rather bigger than necessary. The shrapnel shell, fired under ordinary conditions, will cover with sufficient force an area 33 yards wide by 110 deep, or 3,630 square yards. It, therefore, utilises its weight of metal more advantageously.

“Suppose that instead of a common shell of 8 kilos. we take one of 1 kilo.; it will give only one-eighth of the number of fragments, but its zone of action will be the same as that of the heavier shell, for the size of the zone depends on the relative weights of the bursting charge and of the metal of the shell. The area beaten will be the same, but the force of the blow over the surface will be more in proportion, and the weight will be better utilised. With the same expenditure of weight in ammunition, we shall be able to fire eight small shells instead of one large one, and by judiciously selecting the points of impact, which we can easily do, we shall obtain eight points of burst instead of one. This means that we shall beat with a sufficiently powerful force, and not an excessive one, eight times 800 square yards, that is to say, 6,400 square yards.

“The figures which I have given are merely intended to make the argument clear; only actual experiment, of course, can prove them. My endeavour is to show that it may perhaps be possible to substitute common shell for shrapnel in firing against exposed targets, but that in this case we must use a shell of very much smaller calibre than those adopted hitherto.

“A projectile like this would possess to a very high degree the advantages which the present common shell has against troops behind field works.

“A common shell of 1 kilo. would, on bursting at a given point, produce almost as much effect as one of 8 kilos.; but in a

* General Langlois is quoting from an article which he apparently wrote about 1888, when the French field artillery were armed with the 90 mm. gun.—[TRANS.]

continuous fire we should get, with the same expenditure of ammunition, eight hits instead of one.

"In this way we arrive at the idea of a gun of very small calibre, with a shell of 1 kilo. or even less, but with an extremely rapid rate of fire. It would almost of necessity have to fire with a percussion fuse.

"An artillery composed of guns which are capable of firing 50 1-kilo. shells a minute would have a terrible effect, for the enemy could not avoid the fire by hastily constructed works as nowadays. Still more terrible would be the simplicity with which it could be used, for its fire would be like a continuous stream, enabling a fixed target to be enclosed in the shortest bracket, and a moving target to be followed without leaving it for an instant. So we should get certainty and economy of ammunition in producing a desired effect, or a greater effect in a given time.

"I am showing now how important in the future will be the question of a quick-firing gun with a small calibre and with a percussion shell. I do not think that the time is yet ripe for it, but the subject deserves serious consideration."

At the time I wrote this a quick-firing field gun was the first stage which we had to reach. The second stage is that of an extra-rapid firer with a percussion shell.

The pompoms used at first by the Boers, and afterwards by the British, in spite of the hostility with which their gunners regarded them, were of very small calibre (1 pr.) and represent only the infancy of such a gun as I have conceived it.

Nevertheless, they proved their worth in the South African war, especially at Elandslaagte, where two pompoms rapidly forced a British battery to retire and required the efforts of 12 field-guns to silence them.

The solution of the pompom problem depends almost entirely on the construction of the projectile. It consists in finding (1) a bursting charge of some very powerful explosive which will give the shell a destructive radius of action of about 16 yards, and will at the same time produce smoke, so that the burst may be observed. (2) a very sensitive percussion fuze of light weight and reasonable cost.

I consider that the question of the pompom should from now be seriously studied; although these guns cannot be substituted entirely for quick-firing artillery and shrapnel, yet they might very suitably take their place in the field alongside of them, and in considerable numbers. It is very important that we should not be left behind in the matter.

It is only to be expected that the advocates of the big calibre guns will rise up and object. They do not understand that in field operations where the target of the gun is the man and not the obstacle, the previous superiority of guns of big calibre was due to the fact of their greater range. The 4-inch smooth-bore with an effective range of 600 to 700 yards could not compete with the 12-inch gun which could fire comfortably up to 1,200 yards.

Now, however, the smallest sized shell can be fired quite accurately up to 4,500 or 5,500 yards, and longer ranges can only be used exceptionally and in restricted areas ; further, the invisibility of the adversary makes the employment of very long ranges a matter of luck.

When a satisfactory pompom has been obtained, it will be to the benefit of the side which can manœuvre ; it will be the surest foe of artillery with shields and even of scattered field works. It will benefit the attack almost entirely.

FIFTH PART.

THE EVOLUTION OF TACTICS.

[A.—THE GENERAL LAWS OF THE EVOLUTION OF TACTICS.

The evolution of tactics, the consequence of the never-ending improvements in armaments, follows certain general laws which may be deduced from history, and some of them have already been determined by Ardant du Picq. It is easier nowadays to determine them, because of the rapidity with which important transformations have taken place in our time, these being due to the unexampled progress in industrial sciences.

It seems to me that it will be useful to give a brief exposition of these laws, for a study of them will help to prevent those hasty and inconsiderate deductions, which there is such a temptation to draw from an isolated event or from imperfectly understood facts. It may guide us in all questions of the training, education and organisation of armies, and so keep us from such faults as were committed in the last wars. These faults arose for the most part from errors in appreciation on the part of those high authorities who had been charged with forging that weapon destined for war, the army.

On the opening of hostilities, or during the progress of operations, it is too late to look for the right method.

The two wars, certain actions in which we have just summarily examined, amply show this to be the case.

LAW 1.—*The improved conditions of rifle fire almost always render a frontal attack more difficult, more costly, and consequently more aleatory.*

This proposition requires, so to speak, no discussion; common sense asserts it, and facts prove it. If two bodies of infantry, of equal value in every respect, are opposed to one another, it is certain that the increased power of the rifle, due to successive improvements in range, accuracy, flatness of trajectory, rapidity of loading and absence of smoke, will render the progress of the attacker more arduous;* consequently, the frontal attack becomes more difficult, if not impossible, unless other factors intervene.

Infantry when advancing can only protect themselves to a very moderate extent by their own fire; if they are marching in bodies

* One improvement, which has not yet been realised but which we may look on as imminent, the use of automatic-loading rifles, would appear to be an exception to the rule; because it will greatly facilitate fire lying down, which the attacking troops can use more often than the defence.

one behind the other, only a part of their force is in action, and the troops on the move as soon as they have passed the troops which are stationary, mask their fire. The defence, on the other hand has all its means of action constantly in play and can concentrate its fire on every body of the enemy which is advancing and is not under cover. The defence has in addition, as a general rule, the advantage of cover; and, finally and above all, it is still in possession of *all its morale*, when its fire becomes dangerous to its adversary. This was very far from being the case with the slow-loading smooth-bore muskets whose effective range was not more than 150 to 200 yards; at this distance, the sight of a resolute enemy, and the fear of his charging had already begun to have serious effect on the defenders' spirits, and the accuracy of their fire fell off in consequence. The more resolute side, by a rapid charge, had the best of it, for it risked merely a few badly aimed rounds, that is to say, the minimum fire action.

Increased range, accuracy, and a flat trajectory have for some time been a serious blow to the frontal attack; and quite recently a new factor has been added, which is an undoubted advantage to the defence, that is to say the invisibility of the man firing the rifle.

In short, the attacker can only progress if he has superiority of fire on his side. Taking the case of infantry against infantry this superiority is almost incapable of realisation *unless* :

The number of rifles in the attacking line is considerably greater than that in the defender's.

(This was sometimes the case on the British side.)

Or, very good shooting makes up for the lack of numbers, as was often the case on the Boer side, especially at Nicholson's Nek.

Or, the defenders have little skill in utilising natural cover, and the attackers make admirable use of the ground. (This was nearly always the case when the British were on the defensive.)

Or, one side is surprised (Sannah's Post, etc.).

Or, finally, unless there is a great moral ascendancy and greater will power in the attacking force, as in the case of the Boers at Spion Kop.

Consequences.—From the first of these rules arises the necessity for infantry in the attack to adopt less vulnerable, less dense, and more supple formations. After the line in several ranks, came the line in one rank shoulder to shoulder, then swarms at intervals, and finally skirmishers at greater intervals. This increasing dispersion calls for greater initiative and courage on the part of the individual, and greater intelligence on the part of the men who are less and less under supervision, and, finally, it demands from everyone a higher standard of morale.

The British did not make their formations conform to the new conditions and paid dearly for their fault.

LAW 2.—*The improved conditions of rifle fire facilitate enveloping action or action against a flank.*

All the factors which we have previously enumerated tend on the other hand to make an enveloping, or flank attack more dangerous

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to the defence. Increased range and accuracy, by permitting very effective fire from a distance, greatly aid the attack in enveloping a salient in the defensive position. The flank attack also benefits considerably from these two factors, because they increase the chances which it has of reaching the enemy's flank under cover, and of overwhelming it with enfilade fire.

The use of smokeless powder, too, very sensibly increases the chances of surprising a flank ; this benefits the offensive.

The success of the flank attack depends on manœuvre. Manœuvring power and, therefore, mobility and supple formations are consequently of increasing importance.

Consequences.—What is the result of the two preceding laws ? There may be officers who only take the action of the infantry into consideration and do not sufficiently grasp the necessity for its being one with the other arms. They may consider that the infantry alone fights the battle from Alpha to Omega, in the same way, for example, as the "battalion in the attack" in the drill regulations. These officers will be fatally led to one of the following courses :—

1. If they maintain a true soldierly spirit, the spirit of the offensive, they will always try to envelope, and even to envelope by means of exaggerated fronts with all their units marching in one line and without reserves. I shall not refer again to the dangers of a doctrine like this in a country intersected by obstacles and against an enemy that can manœuvre.

2. Other officers, still keeping the spirit of the offensive, will come to the conclusion that the decisive action ought to be sought for on ground full of natural obstacles, where hidden lines of approach are more frequent. They will do this because they forget the action of the other arms, which require more open ground. Whatever may be said on this subject, the most favourable country, not for the approach, but for the attack, is always that in which the different arms can best act together in unison ; and the more fire-arms improve, the more will the active co-operation of all to the same end become necessary, if an ascendancy is to be gained over the enemy.

We have seen in Part IV, C. 2, that the events of the Transvaal war did not lead Lord Roberts into committing this error.

3. Innovators of less bold spirit will form the demoralising conclusion that the attack is impossible. And so the new formula for victory is arrived at, "the strategic offensive and the tactical defensive," a formula which I cannot understand however hard I try. It seems to me to have been the Boers' policy in the first two periods of the war and that it was their undoing. If with the resources, the numbers, and the enthusiasm which they had at the beginning of the war, the Republicans had known how to change to the tactical offensive, what would have become, we may ask, of Great Britain's power in South Africa, or at least what would victory have cost her ? The tactical defensive lost the Burghers their cause, as it lost ours in 1870, and it will always prove fatal to its supporters.

LAW 3.—*The progressive increase in the power of artillery invariably favours the attack, whether frontal or flank.*

We may be asked, as a general question, why the consequences of the improvements in artillery fire are not the same as those which are due to the development of infantry fire. There are two reasons for the difference :—

(a) The assailant who knows what he wants, and where to strike, is able, owing to the mobility of artillery, to accumulate secretly and at the required time and place a crushing superiority in the means of fire, and so can gain an ascendancy in it which will be proportionately greater as the power of artillery increases.

(b) Artillery is the only arm which can utilise and bring into action at the same time the whole of its strength which is accumulated in a given area. For its front is elastic and it can use several tiers of fire, as it is capable of firing over the heads of its own troops whether infantry or artillery. Lastly, it can prolong its fire continuously, or graduate it as required till the moment comes for the assault. Infantry has none of these powers, and when it is on the move it is deprived of the use of a portion of its rifles.

Given the above, we can prove the law in a few words. To do this, we will consider what the action of the artillery would have been in the attack on a position like Plevna in the days of smoothbores with their short ranges, slow loading, and a powder which emitted volumes of smoke.

There would have been no reason for the defenders to have occupied other positions than those held by the Turks in 1877. What, on the other hand, would be the dispositions of the attacking force, for example, in the central section, in front of Redoubts Nos. 1, 2 and 3 on the heights above the right bank of the Suluklia? (Map No. 2.)

During the whole of the first and longest part of the battle, in order to fire on the enemy's redoubts, the artillery of the attacking force would have had to advance to within 800 or 1,000 yards of the enemy's line, and would consequently have found themselves at the bottom of the ravine. The infantry would have been a little in front of the artillery, and opposite the spaces between the batteries, as the latter could not fire over the heads of their own troops. And there would have been similar situations in the other parts of the battlefield.

We will suppose that after a long engagement extending over the whole front, the commander-in-chief decides to attack the central section. To do this he would have to get together a powerful force of artillery in front of Nos. 1, 2 and 3 Redoubts. As every movement can be seen, he could not take this artillery from the other sections without the enemy's knowing long beforehand what is in store for him. Therefore, it was the custom at this period to keep a portion of the artillery in reserve and to bring it up to the attack at a chosen moment; and in consequence the attacking side was deprived of a considerable part of its strength during a greater portion of the action. In order to make a way for the

infantry, this reserve, as well as the batteries already in action in the section, would have to advance within case shot range of the enemy, about 300 yards; here it would find itself on the ground sloping down from the redoubts where perhaps it could see nothing.

Further, every movement of the reserve batteries would be exposed to the view of the defenders, and so good-bye to surprise, for the latter would have time to manœuvre and prepare for the attack. We see from this picture what small assistance smooth-bore artillery could give its infantry in such circumstances.

Nowadays, during the preparatory phase, the artillery combat would be carried out from the hill to the north of Radishevo, where the greater part of the batteries could be under cover, and there would be a similar procedure in the other sections. When it was decided to attack the central section, a large number of the batteries which had been firing from covered positions in the other sections could be retired easily without the knowledge of the enemy, and a redoubled fire kept up from the other guns. The reinforcement of the artillery on Radishevo Hill would, therefore, be carried out without exciting the attention of the enemy, and the deployment of the new line of guns would not be revealed in any way. The preparation for opening fire would be carried out deliberately and the distribution of targets would be an easy matter.

Further, nearly the whole of the artillery in those positions from which the objective could be seen, such as the first and second spurs in the south-western section and Hill 346 in the southern, would be able to join in the attack. In this way there would be a concentration of fire such as in former days could neither have been realised nor even dreamed of.

The attackers, too, in this case would reap the main advantage of indirect fire, for since their line of heights is higher than that of the defenders, the latter would take longer to find out where the hostile batteries were. Surprise then would be complete, and the shrapnel fire at 2,500, or even at longer ranges, would produce the same effect as the case shot of former days, which is its nearest analogy.

There is, however, this difference between the two, and it is a difference which only benefits the attack, namely, that shrapnel can be fired over the heads of its own infantry and can be kept up till the moment of the assault.

To sum up, the increased range at which decisive fire can be opened, as well as other improvements which have followed, afford the offensive the possibility of manœuvring under cover. It can with secrecy collect at a given point a formidable force and can by its means open a sudden and unexpected fire.

The defence benefits less than the attack from the increased power of artillery. It could move troops in a lateral direction without being seen in the past as well as it can now, and it could prepare even better for a counterstroke, because there was less fear of surprise. Also the smaller extents of front gave the defenders in those days more time to move troops to the threatened point.

The artillery in the defence has to deal with the attacking infantry chiefly, more particularly when it nears the position, therefore little is gained from the increased ranges at which decisive fire can be opened. Further, as the enemy's infantry will utilise for their advance any valleys leading up to the position, the portions of the front from which they can be shelled will be comparatively restricted; this limits the zone to be watched by the attackers counter-batteries, and facilitates their task.

In a word, everything which has been done to increase the power of the artillery benefits the attacker, provided that he knows where he wants to strike and concentrates the means at his disposal with this object in view.

The last principle applies also to the defence, but only where it passes to the offensive by means of the counter-attack, or, better still, by the offensive return, which, affords greater facilities for combining two arms against one at the same moment.

The passive defence is more than ever condemned for every reason.

I have been speaking hitherto of the decisive attack, to carry out which the commander employs, if necessary, every available means at his disposal. But the advantages which the offensive gains from the increased power of the gun are to be found also in those local attacks which must take place everywhere along the front while the preparatory combat is going on. In the case of local attacks, extreme rapidity of fire is the most important of these advantages, because it allows a comparatively small number of guns to develop an enormously powerful fire against the point of attack. When guns had a slow rate of fire, this result could only be obtained by concentrating a large number of batteries—a very difficult and lengthy operation, especially if the batteries were at some distance apart.

Rapidity of fire produces the same results as the concentration of several fires, but its effect is far more certain and instantaneous.

Smoke-producing Shell.—The smoke produced, for instance by our common shell, will be a very useful factor in the decisive attack. Under ordinary conditions, that is to say when the wind is moderate, as it was during the majority of the battles of 1870–71, a fire of medium intensity will produce in front of the target a cloud of smoke quite as great as that with which a battery using black powder used to cover itself.

This is a matter of capital importance, from the point of view of the attack, which is not generally taken into sufficient account. It would be well worth while demonstrating it clearly on the ranges to officers of all arms, making up one's mind to sacrifice a certain amount of ammunition for the purpose; it is rarely, if ever, done.

Artillery can blind the enemy for a considerable time and hinder the accuracy of his fire. In this way it can create artificial cover for the other arms until the moment arrives for the assault.

This leads us to the question of how cavalry with its light batteries should be employed in the decisive attack. Cavalry can

move by ways which are hidden from view and from fire, and, taking advantage of their superior pace, can fall on an enemy in mass and surprise him. After gaining the adversary's position, their first duty will be to drive off the enemy, reconstruct his defences and keep any hostile troops at a distance. These measures will require a short dismounted fight in which the carbine and the entrenching tool will chiefly be used. Afterwards, if the body of cavalry is strong enough, part will mount, while the rest protect their front with fire, and will endeavour to disorganise the retreating troops, to surprise the reserves, or at any rate to menace them and so distract their attention from their chief duty, the counter-attack or the offensive return. The infantry will follow the cavalry as rapidly as possible to relieve it and enable it to continue its normal duties.

This conception of the duties of cavalry in the attack would certainly have been pure folly a few years ago. We see, however, that it can easily be realised now.

I am very far from associating myself with those military critics who, at the German manœuvres, see in the final charge of the masses of cavalry led by the Emperor himself nothing but a useless parade, or at the most a means of exciting the enthusiasm of the cavalry soldiers. I think, quite to the contrary, that it is a very just and wise conception of war.

What I have said about the decisive attack, that is, the attack in which the Commander-in-Chief plays his last trump if needs be, applies equally to all the local attacks, which the long preparatory combat with its numerous vicissitudes entails. This law, therefore, remains immutable, that progress in armament will always require closer and more intimate action between the various arms.

Although I have the most profound belief in the great rôle of cavalry in every act of the battle, even in that most important one, the attack, this is the very reason why I do not wish to see our finesquadrons run the risk of wasting themselves in a premature cavalry duel. I say to the cavalry, be with us in the fight; you will find there the most gallant contests and those which will most contribute to the final victory.

Consequences.—The increased importance of artillery fire in opening the way for the infantry, has as a corollary the increased necessity of silencing the enemy's artillery as soon and as completely as possible. It is this which led to the notion of considering the artillery duel to be a separate phase in the battle: a pedantic idea which it will be useful to explain.

Formerly, the opposing artilleries were about 800 or 1,000 yards apart and bombarded each other for hours before one side or the other was completely out of the contest. Successive improvements in guns have made a decisive action between two lines of batteries a matter which can be more rapidly accomplished. This was proved as a fact several times in 1866, when the Austrian artillery easily mastered that of the Prussians, notably Prince Frederick-Charles' batteries at Sadowa. The same happened in 1870 when

the German guns very often rapidly silenced ours, as at Wörth. Fire with time shrapnel ought further to increase the rapidity with which the artillery duel will be decided. We have little experience, however, to go on from the wars in Turkey and in the Transvaal, because both the Turks and the Boers rarely accepted the artillery duel, and employed their batteries in the same way as an artillery which has already had the worst of it. At Talana Hill and Elands-laagte the duel was rapidly carried out and the side which gained could employ two arms against one.

A new factor has recently appeared to contradict the general rule, though perhaps only temporarily, I mean shields on guns, the use of which threatens to prolong the artillery duel. It is somewhat a returning to the conditions of war at the beginning of the last century. What will happen in these circumstances is, that the artillery will waste each other behind their shields at the same time as the wasting process of the infantry is going on, that is, in the preparatory combat. But we may soon see some new weapon (the pompom, for example) which will be able to attack the detachment behind the shield and so cancel the results of the employment of this artificial cover.

LAW 4.—Fronts are more and more extended.

This is a consequence of the following truth, that any ground beaten by fire may be considered as occupied. To people who only see one side of the battle, the deduction is a war of screens.

Consequence.—As extended actions over enormous fronts will practically never give a decisive result, it becomes more and more necessary to end the battle by a forcible act against a part of the front.

LAW 5.—It is more and more the duty, as it is more and more in the power of the defence, to manœuvre in depth.

This law is the result of three new properties, due to the improvements in modern fire-arms, which may be stated as follows:—

(a) To gain contact with an enemy in position is every day a slower, more difficult, and more costly process.

This proposition seems hardly to require any proof; common sense asserts it and facts amply corroborate it.

The difficulties of gaining contact were particularly striking on the side of the British in the Transvaal, owing to the Boers' skill with the rifle, their keen sense of vision, their aptitude for utilising the ground, and their extreme tactical mobility.

From this we conclude that it is to the interest of the defence to multiply the instances in which the assailant has to gain touch.

(b) The power and length of resistance of mixed detachments of all arms, skilfully manœuvred in supple formations, increase daily with the progress of modern armament.

This proposition is as self-evident as the one before, and it began to be evidenced from the time when rifling increased the range of fire-arms. Even at that period a detachment could make a very superior force deploy, without running any great risks on its own part. It was easily able to break off a fight which would have

been an impossibility before, when muskets had a range of only 200 yards.

The further progress of the rifle enabled a given force of artillery to be protected by a smaller number of infantry; this therefore, increased the number of guns which could accompany a force of infantry, and so gave a greater power to mixed detachments. Invisibility, or rather the small degree of visibility of men firing, is a further advantage to these detachments, as it makes it very hard for the enemy to find out what is in front of him.

The successful operations of De Wet in the third period support my statements.

(c) The deployment of a powerful line of batteries can be carried out under the protection of bodies of infantry, the minimum necessary strength of which is continually decreasing.

This property, which was first brought to notice in the campaign of 1886, permits the defence to keep its hands free, and to open the engagements with powerful means at a long range; this puts the enemy in an evil plight if he commits the least mistake in his deployment or if he brings his artillery into action bit by bit.

How, then, ought the defender to utilise the peculiar properties of modern arms?

The answer to this question is indicated by the conclusions we have already arrived at. It should try and exhaust the enemy by *prolonging the preliminaries* which are so costly and difficult to him; it should endeavour to get him at its mercy by making him deploy his infantry prematurely, by tempting him to make a blow in the air, and by deceiving him as to the number of the troops opposed to him. The defence ought to keep its own infantry carefully in hand and intact, so as to use them in mass at the given moment, that is to say, when the enemy is sufficiently worn out. The means for protracting the preliminaries and for deceiving the enemy, are covering detachments and advanced lines or screens of artillery.

The Duties of Advanced Detachments.—With smoke-producing powder, the duties of advanced detachments pushed out by the defence were limited to keeping contact with the enemy and so obtaining continual information about him, and at the same time delaying his movements; that is to say, the enemy's time was wasted but he was not forced to expend men and ammunition. This was the object of the detachments sent out by General von Werder beyond his front and flanks when he occupied his defensive position on the Lisaine.

The working of the system is the same to-day as in 1870, but it is much more simple now for the defenders to escape in time from the clutches of the enemy. This facility allows them to push further forward, and more space is available for the chain of detachments as well as for the attached cavalry which forms their chief means of offence.

The Boers profited considerably by the new properties of covering detachments. Those of Belmont and Enslin in front of

Cronje, for example, accurately informed him of Lord Methuen's march, delayed that general, and inflicted considerable loss on the British without suffering very much themselves; they also were effective against the morale of their enemy. The detachment commanded later on by De Wet on the Riet River, rendered great services and was a source of considerable uneasiness to Lord Roberts.

The Object of an Advanced Line.—When the chain of covering detachments is forced by the enemy to retire, it falls back disputing every foot of the ground, but only with long range fire. The defence forms its first line of resistance—advanced line or main position*—with a strong backbone of artillery protected by the minimum number of infantry, who are installed in strong fire positions. What must be sought for here is surprise. When the enemy is not expecting it, and when his boldness and confidence have been increased by his previous actions against a weak line of detachments, he must suddenly find himself confronted by a powerful line of fire, which will make him pay dearly for every imprudence and every mistake: for confidence so often shows itself by a want of caution.

The more the power of resistance increases in these detachments, the more easily will this surprise be brought off: (1) because of the greater distance at which the detachments can be sent in front of the main body; (2) because of the greater ease with which they can accomplish their task owing to smokeless powder.

Is not this what happened to Lord Methuen when he inopportunately struck up against the Modder River position, after he had scattered the covering detachments which had opposed him at Belmont and Enslin, and was counting confidently on the men having their dinners at the river?

On several occasions the Boers used these advanced lines, or, to be more exact, their defence was organised in depth.

A few examples will perhaps be useful, because this *new* method, which only became possible after rifling gave arms their present enormous ranges, is still very much discussed. The Burghers must have used by instinct that which common sense could have reasoned out.

Infantry Advanced Lines.—At Belmont the infantry advanced line of the Boers received the night attack and disappeared, but, by deceiving the British as to the position of their enemy, they caused the failure of a well preconceived plan of attack.

At Enslin the British first of all assaulted a large kopje; when this had been captured, the Republicans galloped for a position further north, while one of their detachments, posted on a hill somewhat to the rear, took the British line of advance in flank (Gilbert).

The advanced line in this case exhausted the attackers (the Marines lost a considerable number of men in their assaults), and allowed the defenders, as at Belmont, to alter their dispositions; in

* *Avant-ligne ou position principale.*—[TRANS.]

consequence of which they were not only not enveloped, but were able to threaten the enemy's flank. The advanced line, therefore, enables the defence to manœuvre.

At Modder River, the advanced line, which was posted on the left bank, sufficed to stop the British, who did not push forward to the main position.

Artillery Advanced Lines.—The fight at Lombard's Kop, October 30th, 1899. Sir George White attacked the enemy's position, which was rapidly evacuated when the British advanced. "The screen stretched in front of the British, was suddenly drawn aside to either wing and uncovered the enemy's real line of battle nearly two miles further to the north" (Gilbert).

This outflanked the British on both wings, enabling an enveloping counter-attack to be made; that is to say, not only was the manœuvre admirably conducted, but the offensive was assumed under the best conditions.

At Willow Grange, November 22nd, 1899, the Boers brought some guns up on a hill which was held by one of their outposts with the object of replying to the British guns. On the 23rd, General Hildyard attacked this position by night and carried it without difficulty. According to his report, "the position was successfully reached and carried, but several shots were fired during the march, and when the enemy's trenches were captured, the guns were no longer there." It requires a certain amount of tactical naïvety either to suppose that artillery which had been moved into the outpost line would remain there during the night, or to lead a strong night attack (two battalions in line) against outposts with the secondary object of capturing a few guns. The outposts in this case played the part of an advanced line, and, when they were driven back by the enemy, they left him in the unfortunate plight of having a fresh position in front of him; and there was nothing left for him but to retire.

Defence in Depth.—At Taba Myama (January 20th to January 22nd), at Spion Kop (January 24th to January 25th), and at Waalkrantz (February 5th to February 7th), the British carried a first line of trenches at the edge of the kopjes and found themselves confronted by a second line which was a short distance in rear and supported by artillery. Against this line they were unable to make further progress, and could not even maintain their position.

Examples of this abound in the first period of the war; in the second, the Burghers were demoralised and deployed a thin extended line and a mere menace on their flanks was sufficient to put them to flight. In the first period, although always resting on the defensive, they continued to manœuvre in depth; in the second they were congealed in their positions and abandoned manœuvre. (For the manner in which this expression, *defence in depth*, ought to be interpreted, see C of this Part.)

LAW 6.—*The assailant should more and more perfect and strengthen his means of gaining contact.*

This is the logical consequence of the law which precedes it. Want creates supply, and directly it was found that the difficulties of gaining contact had been increased, it was only natural that measures should be taken to alter and strengthen the means of doing so, and, in short, to make them conform to the new conditions.

What the British did, was the exact opposite to the dictates of common sense. Not only did they not strengthen their means of gaining contact, but they suppressed the most important of them, the advanced guard. Often there was no exploration and even mere combat patrols were not employed. This shows an incomprehensible want of judgment in the higher authorities of the British army.

We cannot blame those who fought in the war if they used the weapon as it was forged for them, and it would be unjust to make them responsible for the faults of others; for I cannot too often repeat that habits learnt in peace manœuvres cannot be changed during war, or, at any rate, only slowly and imperfectly.

How many officers, even nowadays, are ignorant of the duties of the advanced guard, and do not know that it is not only to protect against surprise, but is also a means of reconnaissance, and that by its use the main body avoids premature deployments, wrong lines of advance and attacks delivered in the air.

In nearly all the innovations proposed since the Boer war by those who would throw the doctrines of Napoleon overboard, we find this mistake, that they have forgotten the duties of the advanced guard. The consequences of the mistake will be all the more serious now that the process of gaining contact is every day becoming more arduous.

Personally I am of opinion that the new conditions demand dispositions in depth.

The first duty of the attacking side is to approach the enemy everywhere along his front, so as to gain complete information; at the same time an effort should be made to outflank either wing and so invest the adversary. The cavalry cannot perform the whole of this task, for, if it is too scattered, a mere screen of infantry will stop it, and if it is massed in a division, it may be able to pierce this screen at one point, but will then find itself opposed by an advanced guard. In short, it will have seen little and at the cost of heavy sacrifices.

To make a serious reconnaissance the cavalry must have the assistance of forces which can pierce the screens and see what is hidden behind them, in other words, mixed detachments.

Further, as I have stated and as everyone is agreed, the process of gaining contact with the enemy's antennæ is becoming more difficult every day. To avoid wasting one's forces prematurely, the advance must be made slowly, the enemy must be felt for everywhere, and *time must be lost*, probably a great deal of time.

The result will be that the distance between the advanced detachments and the main body will have to be increased, so that the varying fortunes of the former may not reflect on the columns in rear, and that the latter may march directly on their objectives. It

is no longer a case of pushing forward the contact troops several miles ahead, but rather several leagues, because we must not lose sight of the fact that an able adversary will gain considerable time by prolonging the preliminaries.

The distant detachments do not do away with the necessity for each column to provide its own advanced guard.

We arrive in this way at a formation in depth which is analogous to that which we have indicated for the defence. The rôle of the detachments told off to gain contact is the same as that of the covering troops, except that the feeling of the offensive is more prominent. This feeling is shown chiefly by the action of the cavalry. A temporary defensive may result when the latter has been driven back by the enemy; then its principal mission will be to prevent the penetration of small bodies between the links of the chain. We suppose the cavalry in the offensive to be superior to that of the enemy and that consequently it is the first to gain contact; but this distinction is more theoretical than real.

It amounts to this, that at the commencement of operations there is no distinction to be made between the offensive and the defensive, for in either case the advanced guards must be preceded by covering detachments.

It should be understood that only large units like an army, or at the very least an army corps, would utilise a chain like that described to gain contact.

Is not this method contained in embryo in von Moltke's telegram at the beginning of the war of 1870, when he recommended that "the cavalry should be sent well out and that it should be supported by *advanced guards well pushed forward*, so as to allow the armies, in case of need, time to concentrate"? The instructions of the German general were neither understood nor carried out, because neither the education of the officers nor the training of the troops had foreseen this, so to speak, new method of *well pushed forward advanced guards*. So the recommendation remained a dead letter.

This example again proves that troops and their leaders can only be asked to do in war what they have been trained to do in peace. To wait till war breaks out before discovering what tactics are most suitable to the new conditions of armament is certainly more unwise than to adopt the boldest conclusions.

The above conception of the means for obtaining contact brings us again to the persistent necessity for unity between the different arms. The cavalry without assistance are no longer able to see, so the artillery and infantry must go to their rescue in the strategical exploration as well as in the fight.

LAW 7.—*Progress in armament constantly tends to diminish the power of resistance of permanent fortifications and of works of high relief; on the other hand, it increases the value of hasty field fortifications dispersed and in successive lines.*

The first part of this law has long since been proved by actual facts; the siege of Troy lasted for 10 years and the town was only

taken by a stratagem; in the Middle Ages, the smallest castle blocked the enemy's way and often wore out his patience. Since Vauban's time the power of resistance of fortified places has gradually diminished, till nowadays it is questioned, and not without plausible reasons, whether they cannot be rushed by main force. While Plevna, which was merely an entrenched camp with field works, resisted the Russian armies for several months, Kars, which was a fortress with a comparatively numerous garrison, was captured in a single night.

The common shell as used in the field, or rather that with a high explosive, has recently accentuated the truth of the law just propounded. Formerly, when a parapet of earth had to be destroyed, heavy projectiles were used. A number of small projectiles had no effect because, when they burst, they merely threw up a small shovelful of earth which fell back where it came from. The high explosive common shell of the field artillery of the present day can remove as much earth as the far heavier siege artillery projectiles when filled with ordinary powder. Artillery has in consequence an enormously increased power against an obstacle. This does not mean to say, as we have heard suggested, that we must try and destroy the obstacle, or in other words try and raze field works to the ground. To level, or merely break up a parapet $8\frac{1}{2}$ to 9 feet thick would require no less than 8 to 10 shell per yard, and even then there would be a good deal of cover left. At a range like that from Radishevo Hill to the Turkish redoubts, this would mean an expenditure of at least 40 rounds per yard, and the whole of the ammunition supply of an army corps would not be sufficient to demolish the two dangerous faces of the small No. 1 Redoubt. Artillery cannot level a parapet, but it can rapidly and surely make a small number of breaches in it, and it can easily destroy the embrasure through which a dangerous gun may be firing.

The artillery of the defence, therefore, can gain hardly any protection from field works, either *en barbette* against shrapnel, or in an embrasure against common shell. This is a fact of the highest importance, even in an attack on a fortress.

Although a common shell may not be able to destroy the obstacle, it none the less has the power of rapidly rendering untenable works of high relief and small dimensions, such as the Turkish redoubts. Every shell falling on the superior slope and bursting on ricochet will cause terrific loss to the defenders on the banquette, and the longer the superior slope, and the more important the work, the greater will be the number of hits on it. Every explosive shell which bursts in the interior of a work, in the restricted spaces between the parados and traverses, will also do considerable damage; moreover, the traverses and parados become a danger, for a shell which strikes on them and bursts sends back a large number of stones and splinters which will take the defenders in reverse.

This new weapon of war consequently diminishes to an extraordinary extent the force of resistance of works of high relief and of restricted interior dimensions, even if they are of a permanent nature.

On the other hand, it would be a grave error to say that field fortifications had lost all their value.

If, instead of fortifying a position by a work of high relief, we were to construct numerous trenches forming a strong firing line, were to securely protect their flanks and support them in rear by other trenches one behind another, we should then arrive at a position which would be invulnerable against artillery. This invulnerability would depend not so much on the strength of any one of the component parts, but on their number and extension. Moreover, *the ordinary shelter trench has acquired a considerable capability for resistance from the recently acquired power of infantry fire.* This is an entirely new factor which was brought to light as much at Plevna as in South Africa.

Formerly the power of fortifications depended entirely on the height of the parapet, on the depth of the ditch, and on the many accessories, the object of which was to prevent the enemy's advance. Now fire is the real resisting force, that is to say, the rifle, that is to say, the man, or the *active force*. Consequently recent progress, like all progress before it, only exalts the supremacy of the active force over the passive; or the supremacy of the forces in the field.

The high explosive shell does not destroy the value of fortifications, it merely modifies its forms; it leads us to fortification *in extended order and in depth*, if I may use such an expression. This shows what a striking analogy there is between the forms of fortification and infantry formations, which after all is not to be wondered at.

The Boers' field works were of a most suitable type; they had a low relief and a very deep and narrow trench; the shelter trenches were numerous, well dispersed and disposed in several lines: that is, defence in depth. The results justified these measures.

Which side then is going to benefit by the evolution in field fortification produced by the high-explosive shell and by the new power of the rifle? The principle of former days, which was a very right one and was laid down by Clausewitz, was always to fortify positions by works of high relief. Such works invariably take a long time to make, however many men and tools are available, because space is restricted. This kind of fortification could consequently only be used by the side which had time at its disposal; that is, by the defender.

At the present time, with the men, the rifles, and the tools at his disposal, the assailant can rapidly create positions as strong as those of the defence, and thus obtains all the advantages from fortification which hitherto only the defender enjoyed.

This fact increases the importance of supplying infantry with entrenching tools, and also the importance of unity of action with the fourth arm, the engineers.

Consequence.—The power of resistance which field works possess, lead me to suggest that, in future, the fortified places in the second and third lines, which are provided with permanent works, should

be replaced by temporarily fortified localities. The latter should be organised in view of a given eventuality and their sites should be chosen in order to fulfil some definite purpose. It is a matter of great interest to us to think out how places like these should be organised, but the discussion is outside the scope of the present work. I recommend the matter for consideration to my comrades, to those in high command, and also to laymen.

B.—THE CONSEQUENCES OF THE GENERAL LAWS OF TACTICAL EVOLUTION.

The following are the consequences of the general laws of tactical evolution, as far as preparation for war and the conduct of operations are concerned :—

(a) Manœuvring is of increased importance and so is everything which will facilitate it; therefore, mobility is a daily increasing necessity.

I need not explain again why manœuvre is every day more important, but manœuvre, that is to say, the tactics of moving troops, requires mobility. The desire for speed is common everywhere; it is apparent in every branch of life where there is competition, whether it be manufacture, or commerce, or war. Our particular attention at the present time is directed towards our infantry, to lightening their load, and to studying how we can give them that pace which they lack. Too much study cannot be devoted to the solution of this problem. But the other arms need it too, for they want as much mobility as possible. The cavalry must have faster horses and they must carry less weight;* the artillery must have lighter equipment. I hope, if we are going to study the subject of a new gun, that more attention may be paid to weight than in the past. There appears to be some hereditary strain which makes us prefer power to lightness, just as the Gauls had an affection for their heavy unwieldy swords. We shall progress more and more in the wrong direction if we continue on this road.

The fight between David and Goliath is the first historical fact which shows the importance of agility and the use of a projectile as a weapon.

In war, mobility, agility, and flexibility are converted into force; this is not unsatisfactory for us in view of the temperament of our soldiers, provided that we do not overload them.

(b) Modern war unceasingly demands ever increasing co-operation between the different arms, consequently it demands more thorough organisation.

For some years past ideas seem to have run on the lines of the independence of the various arms. How often have we not seen the following laid down as immutable rules? The encounter will

* Consequently it is, in my opinion, a heresy to give the cavalry soldier three weapons when two are quite enough.

start with a cavalry duel at some distance from the infantry, and woe to the side whose cavalry is the weaker ! Its beaten squadrons will have lost their guns, their liberty of manœuvre, their confidence in themselves, and the confidence of the other troops. They will entirely disappear and will take no further part in the great struggle.

Then the two adversaries will deploy their guns in line, and will begin an engagement which will be quite as decisive as the above-mentioned one, while the two other arms are passive spectators. Again, woe to the army whose artillery is beaten ; it cannot hope to win, for its infantry alone is left to carry on the fight !

In the same way, on the attacking side, the turn of the infantry comes to deliver the decisive shock with the help of the cavalry which is well away on the flanks. But when the infantry reaches the critical moment when it has everything to fear from the counter-attack of an adversary who has lost a *position* but not the battle, it is abandoned to its own devices ; barely is it leisurely sent a "few isolated batteries," to quote the expression used by certain regulations.

If we carefully study the majority of recent works, we shall, as a general rule, find a doctrine like this given out as the last word to be said by science. In other words, separation of the arms triumphs at a time when their close action is more than ever indispensable.

"The most powerful means, if scattered, produce no effect ; this is true of artillery, infantry, or cavalry, and of the whole military system " (Napoleon).

Modern armament requires more than ever intimate connection between the different arms ; this is a general law which Ardant du Picq has clearly set forth.

Cavalry has need of the support of the other arms in the strategical exploration. Infantry cannot do without artillery fire in the fight.

On the march infantry is unable by its own means to protect itself sufficiently far in front. This is the reason why Germany has very rightly formed "mounted scouts," which will be allotted to the various infantry units.

The English took no steps in peace to create and strengthen any union between the arms, and evil overtook them. I cannot insist too much on this point, and we must profit by the lesson.

(c) Modern war requires from all combatants an ever higher standard of morale.

This law has already been given by Ardant du Picq, and it has been affirmed in the brilliant writing of the two articles which I have cited from the "Revue des Deux-Mondes," and in General K ——'s book. As opinions are unanimous, there is no necessity to prove the proposition. Every officer should consider that the duty of developing the morale of his men is his most useful, as it is his most noble work. Very laudable efforts have already been made in this direction, and it remains only to persist still further in them. To temper the hearts of our soldiers must be our principal aim, for this is of more value than everything else, even than that which is called

military instruction. To attain this end, not only are hearty effort, keenness, tact and intelligence required, but also time; therefore, there must be a limit to reductions in the period of military service.

(d) All progress in armament lessens the importance of numbers.

"A skilful general will often be able to paralyse the enemy's forces with a smaller number of his own troops, if he disguises his weakness by audacity and induces the adversary to undertake some difficult task which will cost him a considerable number of men. Then he will be able, with equal numbers, to obtain numerical superiority at the point where the decisive blow is struck and where alone it is profitable, while the enemy dissipates his resources everywhere" (Von der Goltz—*The Nation in Arms*).

Since these lines were written, magazine rifles and smokeless powder have especially developed the power of *disguising one's weakness* and the faculty for *inducing an enemy to undertake a difficult task which will cost him a considerable number of men*, thus benefiting skill at the expense of numbers.

In my opinion, if an army is mobile, supple and well disciplined, if it can manœuvre and knows how to extend in order to live and move, and if it can protect itself well ahead (which it can do now to a far greater extent than formerly), this army, I say, will get the better of a far more numerous one, which is condensed in masses, is unwieldy to manœuvre, and is difficult to feed.

Is not the Anglo-Boer war an argument in support of my theory? The Boers were able to maintain a glorious struggle in spite of numerical inferiority, in the mountainous and broken country of Natal as well as in the open plains of the Veldt, and that they could do this was due to their exceptional prowess with the rifle. (I am limiting myself to this reason because in this work I am only dealing with tactical matters.) If they had been organised and disciplined and had had military instruction, they would have "astonished the world" still more.

In going into the question of the war of masses, it will not do to compare an army of 1,000,000 men with one of 1,500,000, and suppose that the latter is as well trained and equipped as the former. The question must be stated as follows: A nation has a certain sum for its war budget; how can this sum be best employed, by making an army of 1,000,000 men, or an army of 1,500,000? Compared with the latter, the former will have better officers and non-commissioned officers, it will be better instructed, better fed, better clothed, more fitted to undergo a heavy winter campaign, better equipped in every way, more ready for rapid mobilisation to meet any eventuality, more supple, be better at manœuvring, &c. The very considerable and unproductive expenditure on maintaining supplies and stores of every nature in case of war will be largely diminished. The balance will become *productive* expenditure by largely increasing the strength of the army serving with the colours.

We cannot, for instance, fight Germany nowadays with equal numbers. Are we, therefore, to think that our cause is irremediably the weaker for this reason? I do not agree with this. The belief in

the all-power of numbers is demoralising, it has always been wrong, and it is more so now than ever. Individual training, military education, and, above all, morale are the dominant factors in the fight. I am absolutely convinced that *with the same war budget*, well employed, a numerically inferior army will be stronger than an army which spends the *same amount of money* over a larger number of less efficient units.

C. *The Offensive and Defensive.* *

In all discussions the merits of the offensive and of the defensive are put in opposition to one another. It will be advisable now to regard the matter from a more open point of view.

The side which is, or believes itself to be, the weaker and takes up a position, tries to gain superiority of fire by deploying before the other; and, though this superiority may be momentary, it is none the less very dangerous to the other party. If, in one way or another, the adversary gains superiority, the weaker side should not hold on to its position; it ought to avail itself of the facilities afforded by modern armament to retain its liberty of movement and should manœuvre in depth. In choosing a position, there should be no preconceived idea of an *advanced line* or of a *main position*: these ideas must be now abandoned, for they are merely fictitious; they served me chiefly to demonstrate the principle of the *defence in depth*. If the enemy engages his advanced guards in an unfavourable manner, it will be advisable perhaps for us to bring on our action in front of the position we have chosen. If, on the other hand, we are unfavourably engaged, we must carry on the action further back. The *position* is a thing which must be abandoned if it is not successful; our real strength is in our active force, that is to say, in our troops, and our best weapon is to *manœuvre* which we can always do as long as the mass of our infantry is well in hand.

It was in this way, by manœuvre, that the Burghers gained their successes in the first period of the war; successes which were without any result, for nothing else is possible from the pure defensive. Let us disembarass our minds from formulæ and words and keep to the following idea.

As far as the weaker side is concerned, the *position* is of secondary importance, it is troops which give it strength. The position should be chosen in such a way as to leave the defender perfect freedom of movement; to advance and overthrow the enemy's advanced guards if they are in an unfavourable situation or if they commit any faults, or to retire to avoid being closed in or invested by very superior forces; and the enemy should then be worn out by repeatedly making him gain contact, for to do this is always very costly for him.

Modern weapons increase the liberty of manœuvre for the weaker side and it ought always to profit by it.

CONCLUSION.

THE DECREE ON THE DUTIES OF THE ARMY IN THE FIELD.

The decree of May 28th, 1895, on the duties of the army in the field does not describe the various processes of a battle, for these are essentially variable and are dealt with in the regulations belonging to the different arms. The decree has a higher aim and is, therefore, more stable than the regulations. It gives the general outline of the battle as deduced from the experiences of war, experiences gathered not only from the Napoleonic campaigns, but from the more recent wars of 1866, 1870-71, and 1877-78.

The incidents of the last war in South Africa, if given impartial study, so far from furnishing arguments against the principles contained in our decree, show that the British reverses were due to their not being observed.

These principles, if we confine ourselves to the battle proper after contact has been gained, may be summed up as follows: feeling the enemy everywhere, or the preparatory combat; breaking him at one point, or the decisive attack.

This does not imply by any means that the two great phases of the battle are an absolute necessity in every instance. Sometimes a weak enemy may be encountered, or circumstances may be favourable, when a preparatory combat vigorously carried through may result in victory: a decisive attack would be useless in this case. On another occasion everything may be known about the enemy, he may be freezing on to his position, or he may be surprised at fault; a decisive brusque attack in this case would spare the lengthy preliminaries of a frontal attack. These exceptions do not in any way nullify the rule.

I ask my comrades of the army to have entire confidence in the principles contained in the decree on "The Duties of the Army in the Field": to maintain the strongest and most sincere faith in them: to let them penetrate into their hearts and minds and to the very bottom of their souls; then let them apply them and at the same time make intelligent use of the special training regulations supplied to them.

The Laws of Tactical Evolution.

I do not mean by this that tactics are unalterable, for who would support such a heresy? Tactical methods are always changing, and their evolution follows the laws which I have tried to enunciate in Part V. A knowledge of these laws gives us more chance of not

being led astray by the influence of events which are due to local and entirely peculiar circumstances.

Let us sum up these laws.

The repeated improvements of the rifle increase the difficulties of the frontal attack if made by infantry alone; they give an ever-increasing power of resistance to simple hasty field fortifications; they facilitate flank or enveloping attacks, in other words manœuvre.

The progress in artillery facilitates the attack, whether it be frontal or flank.

Progress in armament tends to increase the difficulty of gaining contact, it facilitates the employment of depth by the defence by giving it increased power to manœuvre. The attacking side, consequently, must increase and strengthen the troops whose object is to gain contact.

Battle-fronts increase with the lengthening of the effective range of modern weapons; for this reason there is all the greater need for a blow in force against a given part: in other words, for a decisive attack.

The general consequences are, the increasing importance of manœuvre, mobility, flexibility, co-operation, initiative, military training and education, and, above all, morale; in short, the superior value of quality to numbers.

Training Manuals (Règlements de Manœuvre).

Tactics are constantly changing, and to avoid always altering our training manuals—which is most undesirable with an army whose numerous reserves are rarely called up in peace—they must be conceived on broad lines; a narrow spirit of formalism must be excluded, and a large amount must be left to be interpreted. In short, the regulations ought to show troops how to manœuvre in order and with the greatest flexibility; the manner in which troops are to be employed in the different situations which arise, must be left to the initiative of those in command in every degree of rank.

For this reason our new provisional infantry manual* shows distinct marks of improvement, though, in my opinion, it might have given still more room for individual intelligence, interpretation, and initiative. It is true that it is very difficult to suddenly break an inveterate habit, and I have heard certain officers complain that the new work is not sufficiently definite on some point or other. These officers have been so accustomed throughout their service to walk on a narrow path hedged on either side by a regulation, that they are afraid of liberty and of a wide and open field. They cannot, all of a sudden, grasp the need for using their intelligence, for decision, and for accepting responsibility; for there was no great necessity for these when men fought shoulder to shoulder and the various units were closely packed together. This is a matter of education, and not a long one, with troops of our quality

* The "Règlement provisoire" of October 8th, 1902. This has been replaced by the "Règlement" of December 3rd, 1904.

and temperament, if only the military authorities will go the right way to work.

Doctrine.

Yet it does not do to think that training manuals, however excellent, are all that is required to prepare an army for victory. The drill books in England before the Boer war were quite as good as those of other European armies; they were faithfully carried out to the letter, but they were not connected by a general common doctrine.

This introduces a new factor, which is independent of text books, *tactical education*, or *doctrine*; a factor which has been rendered indispensable by the increased necessity for initiative. This tactical education is the duty of the supreme commanding authority of the army; it is his province to establish the doctrine and to instill it into the minds of all.

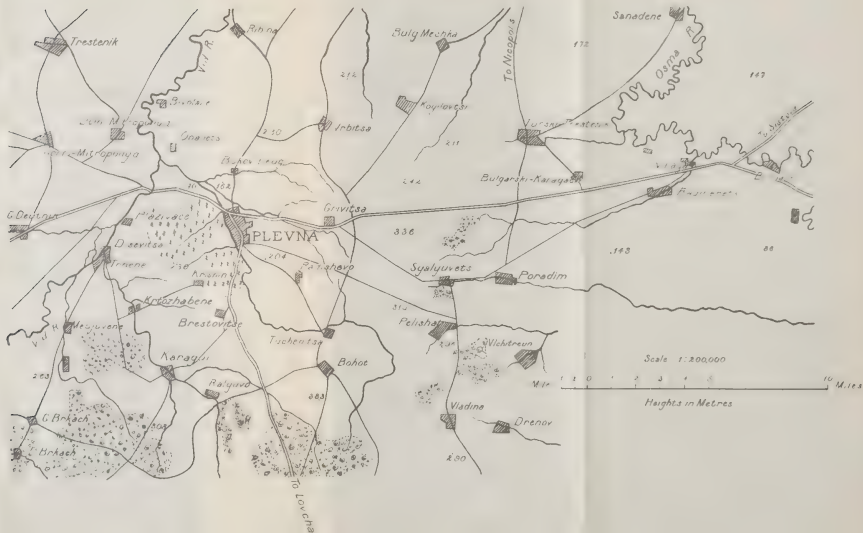
Without a doctrine, text books are of little avail; better a doctrine without text books than text books without a doctrine, for the former was the case in Napoleon's time.

The means by which the supreme commanding authority should disseminate his doctrine is an interesting and profitable study for us all.

CONCLUSION.

I will end this work by a last conclusion. The decree on "The Duties of the Army in the Field" is based on the experiences of war; its principles are sound and lasting; we have only to understand them properly, and to apply them intelligently.

1



Map No 2

— PLEVNA —

At the time of the 3rd Battle

Scale 50000

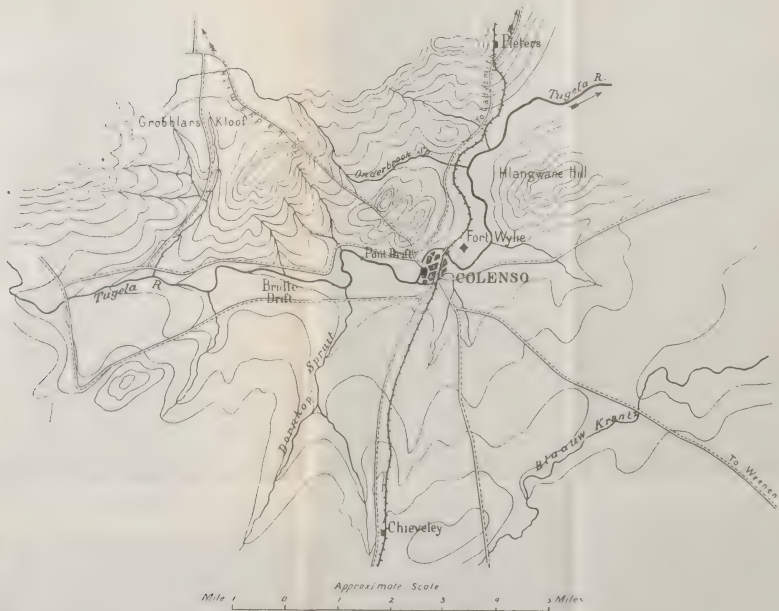
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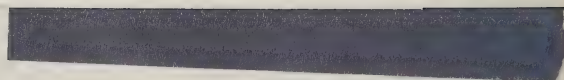


EXPLANATION.

- Turkish Works
- Woods
- Vineyards

MAP N° 3. - BATTLE of COLENZO (15th DECEMBER 1899.)





MAP N° 4. SECOND ATTEMPT TO RELIEVE LADYSMITH.



